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JAMES J. DAVIS, Secretary  
BUREAU OF LABOR STATISTICS  
ETHELBERT STEWART, Commissioner

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JOHN E. Tamm, Secretary  
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CHARLES STEWART, Commissioner

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## THIS ISSUE IN BRIEF

*Large numbers of unskilled laborers in the United States are not participating as they should in the prosperity of the country.*—This fact has been emphasized in recent statements by President Coolidge and by the Secretary of Labor. For example, the average earnings of railroad track laborers in 1926 were only \$17 per week, and in the lumber industry in 1925 average earnings of unskilled labor in all districts were only \$17.77 per week and in the lowest-paid district only \$10.48 per week (p. 1).

*An inquiry into employee retirement systems of States and cities* has recently been undertaken by the Bureau of Labor Statistics, and an article on page 10 gives a preliminary report on systems in force in Pennsylvania. The age at which retirement on pension is permitted varies in the systems discussed from 45 to 62, and the length of service required is from 10 to 25 years. Police and firemen's systems have lower ages than others, but require fairly long terms of service. All the plans covered are contributory, but the contributions demanded from the employees vary considerably.

*Farm children are being trained in scientific methods of agriculture* by the United States Department of Agriculture in cooperation with the State agricultural colleges. Such training not only fits the young agriculturist for his job; it also raises the living and working standards on the farm, develops leadership in farm children, arouses a desire for further education, and tends to make them look upon agriculture as their life job, and by so doing helps to solve the problem of the supply of labor on the farm (p. 3).

*The cost of living in the United States in June, 1927, was almost 1 per cent lower than in June, 1926, and 1.3 per cent lower than in December, 1926,* according to the semiannual survey made by the Bureau of Labor Statistics (p. 202).

*An analysis of accident rates in the iron and steel industry, by States,* shows that as a rule those States in which there has been the most extensive and most prolonged safety effort have the lowest accident rates over a period of years (p. 43).

*Rock dusting of all coal mines, except anthracite mines,* in every part, whether in damp or dry condition, is advocated by the United States Bureau of Mines in order to prevent the propagation of mine explosions, and specifications for rock dusting have been determined from nearly 1,000 explosion tests in the bureau's experimental mine. The effectiveness of rock dusting has received practical demonstration in two coal-mine explosions which occurred recently in Pennsylvania. Ten men were killed in these explosions, but the lives of 700 were saved, as the explosions were limited by the rock dust to the place where they originated (p. 54).

*The amount of labor necessary to produce and market an acre of corn* varies from 15-20 man-hours in the corn belt of the Middle West to 50-70 man-hours in some of the Southern States. Similar wide

variations exist in the case of cotton and other crops. The differences are largely due to the degree in which the topography of the land permits, and local practice accepts, the use of improved machinery (p. 35).

*The right of a former convict to receive damages for an industrial accident* has been upheld by the Supreme Court of Nebraska. The court held that conviction of crime does not deprive a person of his civil right to his property and earnings nor deny him due process to the courts to protect his property and earnings (p. 72).

*Negro labor is slowly improving its position in the industries of West Virginia*, according to a report of the Bureau of Negro Welfare and Statistics of that State. A number of mills and factories, which formerly excluded negroes, are now employing them. More are employed in the railroad yards and maintenance of way work, and negro bricklayers, carpenters, and other skilled building craftsmen are increasing in number and finding ready employment (p. 27).

*American capital invested in other countries may cause a reduction in American standards of living.*—Thus, American capital invested in the textile industry of oriental countries, with low-paid labor, may drive the American factories out of business or cause a demand for greatly reduced wages in order to meet the oriental competition. Such developments are not at all impossible in the struggle for international markets, according to an article by the Washington representative of the International Labor Office (p. 25).

*A description of the welfare work in company towns* shows something of the scope of the companies' activities in these towns. Among the features provided for employees and their families are houses, schools, parks, and recreation grounds, as well as medical and nursing care, day nurseries for the children of working mothers, playground supervision for children, and trained leadership in the recreation and club activities of both the young people and the older members of the community (p. 90).

*A child endowment act has been passed in New South Wales* providing an allowance of 5 shillings per week for children under 14 years of age. This allowance is to supplement a basic wage to be declared by the industrial commissioner and fixed according to the requirements of a man and wife without children. The Australian Prime Minister called a conference early in June, 1927, to formulate a national child endowment policy (p. 32).

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# LABOR REVIEW

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## Low Earnings of Unskilled Labor in the United States

THE relatively high level of wages now existing in the United States has been the subject of frequent comment both by American and foreign observers. Reiteration of this comment, however, should not blind us to the fact that there exist in this country large numbers of common laborers whose earnings, under the best of conditions, are far below the requirements of healthful living and good citizenship.

This fact has been given forceful expression in recent statements by the President of the United States and by the Secretary of Labor. Speaking at Hammond, Ind., on June 14, President Coolidge said: "While we have reached the highest point in material prosperity ever achieved, there is a considerable class of unskilled workers who have not come into full participation in the wealth of the Nation." Secretary Davis, in an address at Washington, on June 22, estimated that there are several millions of unskilled laborers in the United States whose wages are so low as to constitute a moral and economic misfortune:

If these underpaid workers were few in number, and existed only in scattered instances, the inequality would be less great. But if we count them up, if we think of those in all our industries who may lack mechanical skill but who nevertheless shoulder the heavy weights and do the roughest work, we find a great part of American industry shot through with these unfortunates. It is not an exaggeration to say that we have some millions of these hard-worked but underpaid Americans. Taken together with their families and their dependents, I would venture to say we have among us from ten to fifteen millions of people who do not share as they should in the prosperity enjoyed by the rest of us. Morally, economically, and on the grounds of simple humanity, this inequality should not be allowed to exist in this richest nation of history.

No complete data exist regarding the actual earnings of unskilled labor of all classes. For certain industries, however, studies by the Bureau of Labor Statistics and other authoritative agencies give a reasonably accurate picture of the earning capacity of their unskilled employees. These data are summarized in the table below. Except in the case of coal mining and railroads, the earnings are expressed in terms of full-time weekly earnings, that is to say, the amount the average laborer would earn in a week if his employing establishment was operating full time and he lost no time at all through unemploy-

ment, sickness, accident, or other causes. The figures, therefore, may be taken as extremely conservative, representing maximum possible earnings and thus being in excess of the actual amount which the average worker receives and must live upon. In the case of coal mining and the railroads the information is reported only in the form of actual earnings.

The data given relate solely to males, and, while age classification is not available, it is known that common labor work is almost invariably of a type to demand an adult's strength. Moreover, the term "common labor" or "unskilled labor" is rather elastic. In general, it implies work requiring little or no previous training, but very often the work does demand considerable intelligence and often involves a high degree of responsibility. Not infrequently, indeed, the term "common labor" means nothing more than the lowest-paid labor in the particular establishment or industry.

Of the industries for which data can be given, railroad laborers have the lowest earnings, the average for 1926 being only \$17 per week. This is a large group of employees, numbering well over 200,000. The lumber industry ranks next lowest, average weekly earnings for all districts being only \$17.77, and for the lowest-paid district only \$10.48. In bituminous coal mining, owing to the irregularity of operation, over which the individual worker has no control, weekly earnings for all districts averaged only \$22.78 for inside laborers and \$23.58 for outside laborers, and in the lowest district were only \$10.34.

Only in the case of anthracite coal mining, foundries, and motor-vehicle manufacture did the weekly earnings for all districts average more than \$25 per week, and even in the second and third of these three industries the average earnings in the lowest-paid districts were well below \$25, being indeed as low as \$14.37 in the case of foundries. Moreover, it is to be emphasized that in the case of all the manufacturing industries listed, the earnings reported are full-time earnings and thus in excess of the actual earnings. Full-time earnings can only be obtained by those who are so fortunate as to be working for an establishment which operates full time and who lose no time from sickness, accident, or other misfortunes.

The figures here presented indicate clearly that there are groups of laborers in many industries who are receiving very inadequate wages. This is evident even though the difficulty is recognized of determining just what is an adequate living wage. Anyone with experience of life and of the present-day cost of living must recognize that many, and probably most, of the men included in the surveys here referred to were not receiving sufficient for the maintenance of a family at a wholesome standard of living.

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## AVERAGE WEEKLY EARNINGS OF MALE COMMON LABORERS IN VARIOUS INDUSTRIES AND DISTRICTS

Industry	Average full-time hours per week <sup>1</sup>	Average full-time earnings per week <sup>1</sup>		
		Lowest district	Highest district	All districts
Lumber (1925)	57.5	\$10.48	\$25.27	\$17.77
Slaughtering and meat packing: All departments (1925)	50.2	17.04	25.34	21.35
Woolen and worsted goods manufacturing: (1926)	49.4	20.77	27.82	21.98
Machine shops (1925)	50.6	11.78	25.32	23.07
Paper box-board manufacturing (1926)	56.7	13.37	28.05	23.99
Blast furnaces (1926)	62.4	16.14	27.72	24.34
Foundries (1925)	52.5	14.37	28.67	25.25
Motor vehicle manufacturing (1925)	50.4	24.02	30.26	28.73
Bituminous coal mining (1926): <sup>2</sup>				
Inside laborers		10.34	33.90	22.78
Outside laborers		11.03	37.69	23.58
Anthracite coal mining (1924): <sup>3</sup>				
Inside laborers				29.42
Outside laborers				29.45
Metaliferous mines; underground (1924)	52.1	19.80	27.73	22.04
Railroads: Track laborers (1926): <sup>4</sup>	47.5			17.00

<sup>1</sup> Except in the case of coal mining and railroads, where the only available data are for actual earnings and actual hours.

<sup>2</sup> The weekly earnings are computed as equal to seven-fifteenths of the half-month earnings reported.

<sup>3</sup> Weekly earnings are computed as equal to one fifty-second of the annual earnings reported by the Interstate Commerce Commission.

The sources of the table are the wage surveys of the United States Bureau of Labor Statistics and, for railroad labor, the reports of the Interstate Commerce Commission. The weekly earnings are shown, where data are available, for the industry as a whole and also for the lowest and highest district or department, as given in the original report.

### Vocational Education for Farm Children<sup>1</sup>

THE first national meeting of farm children trained through extension work was held in Washington, D. C., during the week beginning June 16, 1927. The gathering was sponsored by the United States Department of Agriculture as a part of its general cooperative extension work. Since 1914 the Department of Agriculture has, under the authority of a law known as the Smith-Lever Act, been cooperating with the State agricultural colleges in carrying on extension work in agriculture and home economics on farms and in farm homes throughout the United States. The expense of the work is shared by the Federal Government, the States, and the counties which accept the provisions of the act. Through the work the attempt is made to reach both adults and children on the farm. The national camp above mentioned was, in a sense, the culmination of the department's work, to date, among the farm children.

<sup>1</sup> Data are from U. S. Department of Agriculture, Office of Cooperative Extension: Cooperative extension work, 1924, with 10-year review, Washington, 1926; Boys' and Girls' 4-H Club Leader, issues of February to April, 1927; National Boys' and Girls' Club News, June 10, 1927; U. S. Department of Agriculture Miscellaneous Circular No. 77; U. S. Department of Agriculture press releases of Apr. 20 and June 14-17, 1927; and original material furnished by the Office of Cooperative Extension, which also supplied the illustrations used.

As a first step in extension work among children the attempt is made to form "4-H Clubs"<sup>2</sup> among the boys and girls of the county. Each member undertakes one or more specific "projects"—the raising of a pig, a cow, chickens, the cultivation of a plot of ground in some crop, etc.—and pledges himself to follow the best practices in connection therewith, as determined by the State and Federal Government departments.

The field of the work is indicated by the fact that, according to the census figures, there are some 11,000,000 rural boys and girls between the ages of 10 and 18 years, of whom 27 per cent are not in school. In 1924, 510,355 young people were enrolled in club work, and of these, 58 per cent were girls.

This extension work is fundamentally vocational education on the farm—training the young agriculturist for his job. Since the farm problem is essentially that of labor, the work is important from the labor standpoint in that it is providing trained and efficient labor for the farms.

#### Lines of Work Undertaken

THE "projects" undertaken by the children include work in the raising of various kinds of farm animals, planting and caring for some kind of crop, learning to judge livestock, seeds, etc., dairying, forestry, sewing, canning and preserving, cooking, renovation of furniture, judging of fabrics, farm and home management, sanitation and health work, etc. Children undertaking the raising of animals or poultry are encouraged to fix as their goal the securing of purebred stock and in this way to raise the livestock standard of the county.

Although, in general, the boys' projects are usually some work connected with the farm and those of the girls with the home, this is by no means always the case. Thus, of the 300,545 girls enrolled in 1924, 173,545 were engaged in some phase of clothing construction and 83,149 in food preservation. But there were also 51,921 girls in poultry clubs, 7,224 in dairy clubs, and 66,499 girls in gardening projects. Of the three young people recently sent abroad to compete in an international cattle-judging contest, one was a girl who had won first place in the national contest in this country.

#### System and Method of Instruction

THE extension work is carried on through "technically trained and practically minded" agricultural agents. Generally there is a man agent to train the boys and a woman agent for work with the girls. These agents make their homes in the county in which they work and have a central office through which they may be reached, but spend their time largely in directing demonstrations of actual improved farming practices carried on by farmers in various points in the county and in interesting all farmers of the county in the progress and results of these improved practices. In the specialized problems which the agent is often called upon to handle he is assisted

<sup>2</sup> The general object of these clubs is the development of head, hand, heart, and health, as exemplified in the pledge adopted at the national congress, which is already in use in many States: "I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living, for my club, my community, and my country."



FIG. 1.—COUNTY AGENT INSPECTING FARM ACCOUNTS OF 4-H CLUB BOY OF CONNECTICUT



FIG. 2.—INSPECTION OF SPACING OF COTTON PLANTED BY LOUISIANA BOY



by the corps of specialists in various subjects maintained at the State agricultural college.

"Club work is learning by doing." When the child undertakes a project he must follow the directions of the county agent as to the methods to be used. If he decides to raise a pig, he must feed and care for it as directed by the agent. He learns how to keep a standard system of accounts of the expenditure for feed and any other expense, of the time spent in the work, of the amount realized from the sale of the pig, etc. In this way not only are improved methods of stock raising, farming, etc., introduced on the farm, but the youngster learns to put his work on a business basis so that when he grows up and becomes a farmer himself he will know exactly how his farm stands as a business and producing unit.

Figure 1 shows a county agent inspecting the farm accounts of John Visney (the boy with the hoe). John is the son of immigrant parents from Slovakia. In 1922 he won the prize as national champion junior dairy cattle judge of the United States. In addition he had been interested in dairying, improved silage corn, certified seed potatoes, the Connecticut system of farm accounts, general farm improvement, and a community program. By careful study of breeding methods the average milk yield of his cows has been increased 1,200 pounds per cow in the past two years.

Although the individual child's work is done at his own home, he receives the stimulus of the interchange of ideas and experience with young people doing work on similar projects through the 4-H Club meetings held at some convenient place, usually the home of one of the members. At these meetings the children discuss the work, hold demonstrations, learn how to correct any mistakes, learn parliamentary procedure, how to conduct meetings, etc.

Instruction is most informal, being "conducted out of doors in the fields, the orchards, the barns, or in the home, the creamery, or the market place." If the specific project is that of raising cotton, the agent goes out into the field with the boy, inspects the work, points out any ways in which improvement can be made, etc. (See fig. 2.) Often these demonstrations attract not only the club members but the farmers of the community, as shown in Figure 3, where a demonstration is being given of diseases attacking potato plants.

As the boys and girls become proficient they are taught to give demonstrations of their work to their fellow club members and to older members of the community who are interested. Also they are encouraged to make exhibits of the results of their handiwork at county and State fairs, etc.

#### Achievements of Club Members

THE work expands in ever-widening circles. As the boy or girl sees the results that can be obtained by following scientific methods, his interest is apt to be aroused along other lines, and he undertakes new and different projects. The lines of work some of these boys and girls have entered and the results obtained are quite remarkable. One of the delegates to the national camp was an Italian boy from Connecticut who embodies the 4-H interest in the most improved methods. His daily work consists of 8 to 10 hours'

labor on his father's produce farm, but in his spare time he has succeeded in raising a herd of five registered Southdown sheep, several Ayershire heifers, one of which took the grand prize at the Eastern States Exposition, and one of the five best flocks of Rhode Island Red chickens in the State. "His poultry plant is equipped with electric lights, trap nests, modern coal-burning brooders, and a mammoth Newton incubator of 1,200 eggs capacity, chicks from which are booked in advance. He made high individual score in poultry judging at Madison Square Garden poultry show in 1926." His stock and equipment are valued at \$2,500, all earned through 4-H Club work. His work and enthusiasm have inspired the boys in his vicinity to organize a poultry club. He has given three younger brothers different varieties of poultry to start their "projects." He is now enrolling a group of the younger girls in his neighborhood into a club so that his 10-year old sister may have the advantages of club work.

Sallie Wilhelm, of South Dakota, has been in club work since 1923. She is now 19 years of age. In 1923 she took canning as her project, completed her work, demonstrated commercial canning at two fairs, and won third place in demonstration at the State fair. The next year she undertook general food work as well as sewing, winning the State championship in food and grand championship in home economics. She represented her State in an interstate fair, tieing Wisconsin for third place and winning a trip to the international fair at Chicago. Continuing her canning and food work in 1925, she won first prize for a cake entered at the State fair and also won a silver medal for health work. In 1926 she was for the second year local leader for a food club and president of a canning club. During the season she canned 371 quarts of fruits, vegetables, meats, jellies, and jams, having a value of \$154.25, the labor and material costing \$31.43, leaving \$122.82 profit. She also prepared 136 meals, baked 202 loaves of bread, made 24½ dozen buns, completed 70 articles in sewing, and secured 82 new 4-H Club members. She was sent to Chicago as champion health girl from South Dakota and coached the demonstration team which won third place at the State fair.

Some of the 4-H Club members have made substantial earnings from their club projects. One Mississippi girl specialized in basket weaving and in the course of her work taught, by mail, women in 20 States to make baskets. In four years she cleared \$900 through her work in basketry and canning, besides \$177.35 in cash prizes. Another girl, from Arkansas, made \$1,000 in profits from her poultry and her garden.

Joe King, of Nebraska, sold in one year more than \$1,600 worth of livestock besides earning \$150 in premiums. A Greek boy in Massachusetts specialized in vegetables, earning in the summer of 1926 the sum of \$293.88. In addition to his sale of vegetables he has built up "a good business in flowering plants and herbs," and from the proceeds he has bought an acre of land.

The 150 young people who attended the national camp have accumulated through club work about \$48,000 worth of property, purebred livestock, and modern equipment, and have made profits amounting to \$52,421. The bank deposits of the group amount to \$13,442.

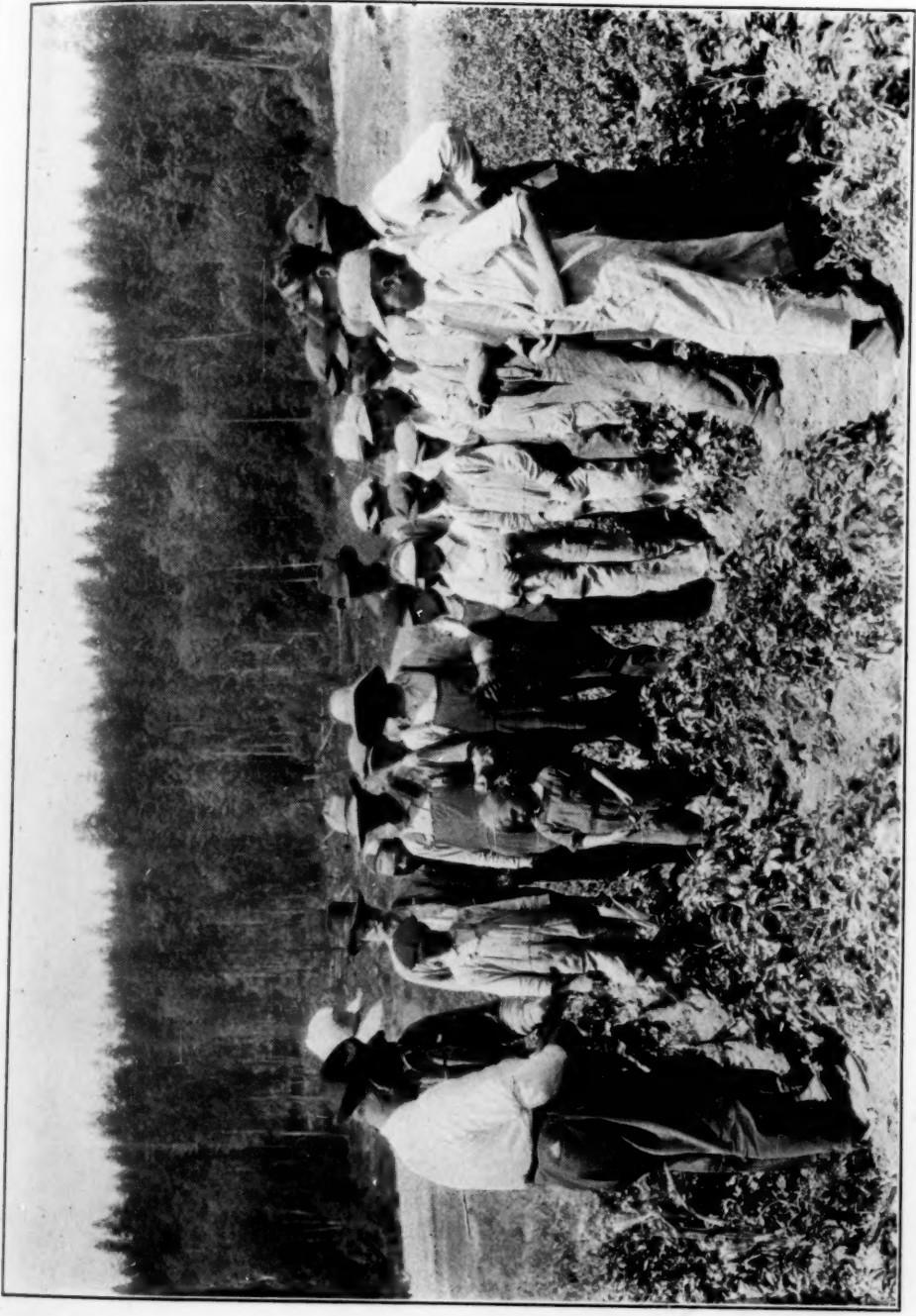
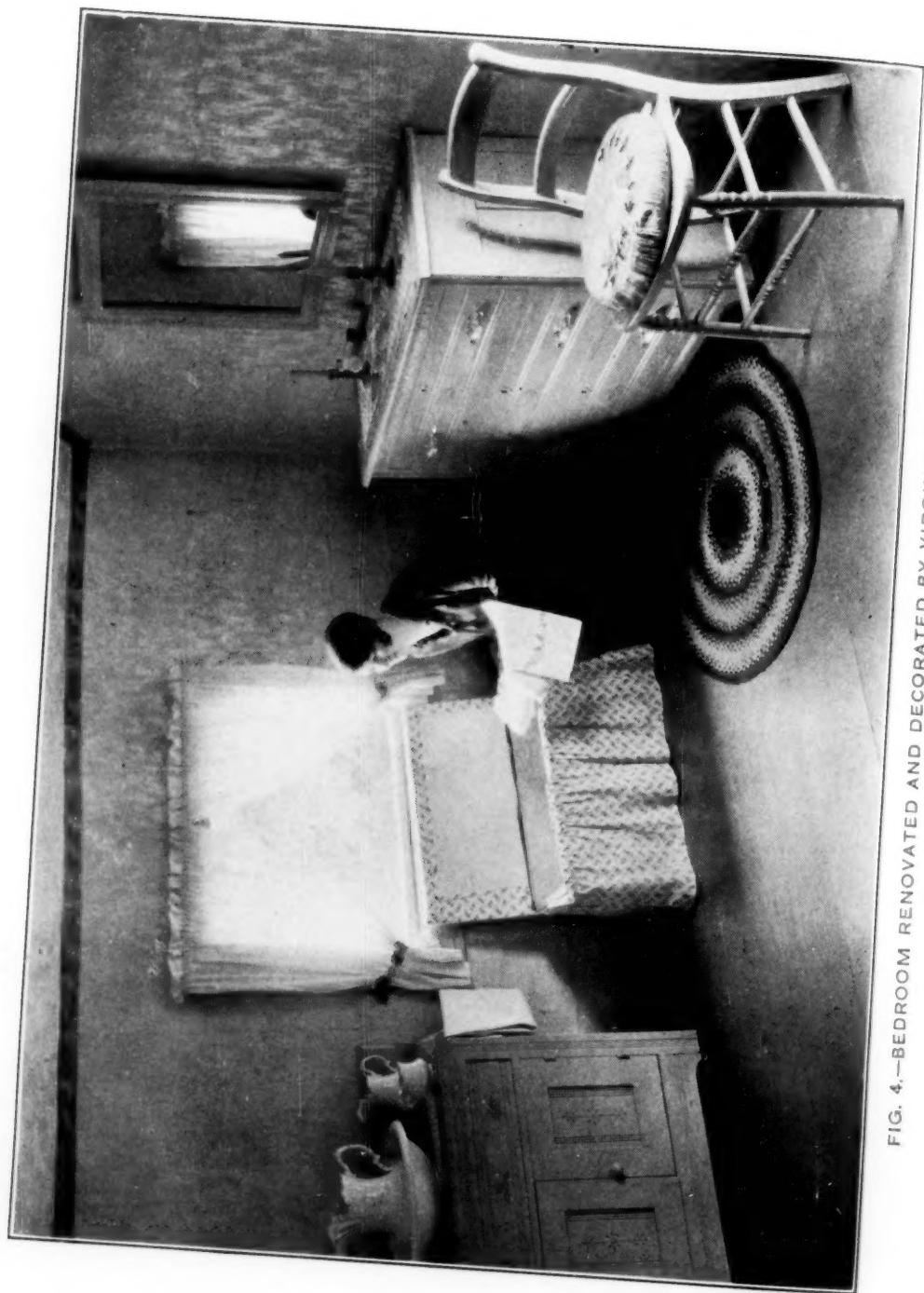


FIG. 3.—FARM DEMONSTRATION OF DISEASES OF POTATO PLANTS IN WASHINGTON

FIG. 4.—BEDROOM RENOVATED AND DECORATED BY VIRGINIA 4-H CLUB MEMBER



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### Rewards of 4-H Club Work

BESIDES the incentive of performance of a piece of work to the best of one's ability, the 4-H Club boys and girls vie with each other for perfect performance. As already stated, exhibits are made, either as individuals or as clubs, at State and county fairs, and many prizes are won.

In many instances the work of these young people has attracted the attention of the local business men and bankers, who have been generous in their support. An official report of the United States Office of Cooperative Extension states: "There probably is no phase of rural extension work more popular, or which the people more willingly support financially than boys' and girls' club work."<sup>3</sup>

Often the local business men offer prizes to the boy or girl excelling in some particular phase of work or for general outstanding ability or achievements. These may consist of money, a trip, or a scholarship at the State agricultural college. The State universities have also offered scholarships for 4-H Club members, and short courses have been started for their special needs. Thus, recently, a short course in North Dakota brought some 300 club members together for a week's training, while that offered by the Iowa State Agricultural College was given to 2,475 students. The State Fair Association of Texas has been granting college scholarships to 4-H members each year for outstanding work in agriculture. In Montana 95 scholarships in the State university are given by the State board of education. A large railroad has awarded altogether 43 college scholarships; in 21 cases the winner chose an educational trip instead of the scholarship. Another railroad, from 1911 to 1919, donated \$40,000 in prizes, mainly of purebred stock, to club members in the territory served by the railroad.

Every year local banks have lent large sums to 4-H boys and girls to enable them to purchase seeds, purebred stock, etc.

In Georgia many counties have adopted the policy of awarding certificates to club girls who have completed four years of club work. Often a luncheon or dinner is given by some local organization and the occasion is made a real event.

Through cooperative effort by the clubs, vacation camps have been held in many places by county groups, or State-wide gatherings have been organized by the State colleges, fair associations, etc. These camps combine recreation with training. The trip to the national camp at Washington, D. C., was in many cases given as the reward for achievements in club work; in some cases the clubs themselves financed their delegates' trip, but all of the delegates, of whom each State was entitled to be represented by four, were the most outstanding 4-H Club members in their State.

### Results of Extension Work Among Young People

1. THE primary result of the cooperative extension work in agriculture is the adoption of better farm and home practices. Although cooperative extension work is also carried on directly

<sup>3</sup> United States, Department of Agriculture, Office of Cooperative Extension Work, *Cooperative extension work, 1924, with a 10-year review*, Washington, 1926, p. 87.

among the adults in the farming community, it sometimes happens that the older people do not at first see the value of the scientific methods. After the young son of the family has become interested in better methods and has by the results of his work shown what the new methods will do the parents become interested; in one case the father was so impressed with the boy's results that he asked to be taken into partnership. At the same time the daughter learns new methods of canning, sewing, home improvement, etc. She looks about her and sees how her home conditions can be improved, demonstrates them to her mother, and wins her as a convert. Some of the most interesting of the 4-H Club work has been done by girls who, starting with their own bedrooms, have eventually renovated the whole house. One Virginia girl (see fig. 4) reports as to her work on her bedroom as follows:

The first thing I did was to pull all the nails out of the wall, then I tore off all loose paper on the wall and pasted strips of cheesecloth over some of the cracks to keep the paper from bursting. I cleaned up some old paint around the edge of the floor with a strong solution of lye, which was a very unpleasant job, but nevertheless I kept trying. I got Miss O. to help me select the kind of paper I wanted, so she suggested that I get cream for the walls and white for the ceiling, with a 3-inch border. One of my friends helped me put on the ceiling and I did the rest myself. Miss M. came and made arrangements to meet me in Roanoke and help me select the paints I needed, so I got the best grade; for the floor, one-half gallon of dark buff; for the door, mahogany; for the furniture, which consists of bed, dresser, washstand, bedside table, and two chairs, one quart of ivory enamel; also enough for the door and window facings.

I got some cretonne to cover a window seat, glass handles for my dresser, candles and candlesticks, peanut can to make a wastebasket, and curtain rods. I had a time getting my packages to the car. When I got home I was all down and out. As soon as I could I moved all the furniture out of the room, painted the floor two coats, and washed off the furniture. I took the mirror to the dresser out of the frame and fastened it to the wall. I enameled all the furniture, also a vase, wastebasket, and an ink bottle. I stenciled a very small flower on my dresser, washstand, and backs of two chairs. I bought a chair seat for one chair.

The curtains are cream with buff shades with blue and rose tie-backs. As soon as the floor was dry enough I moved all furniture back. The scarfs for my washstand and dresser are dimity, with a rose flower and a 2-inch border of solid rose voile.

I have one small picture. I made three braided rugs for the floor, and I also sold two for \$4.50 to help pay my expenses. On the bed I have a cream crinkled bedspread with a buff stripe in it. I have one walnut desk made about 75 years ago by my grandfather, which I treasure very highly.

My expenses were \$5.50. The rugs I sold and the few berries I picked covered all my expenses, so I'm not out anything and I have my room to enjoy.

Another girl, from Mississippi, made such improvements throughout her home that "Dad has promised to paint the house inside and out."

Beautification of the yard and surroundings comes next. Shrubs and flowers are planted and the whole appearance of the farm is improved, increasing the pride and self-respect of the family.

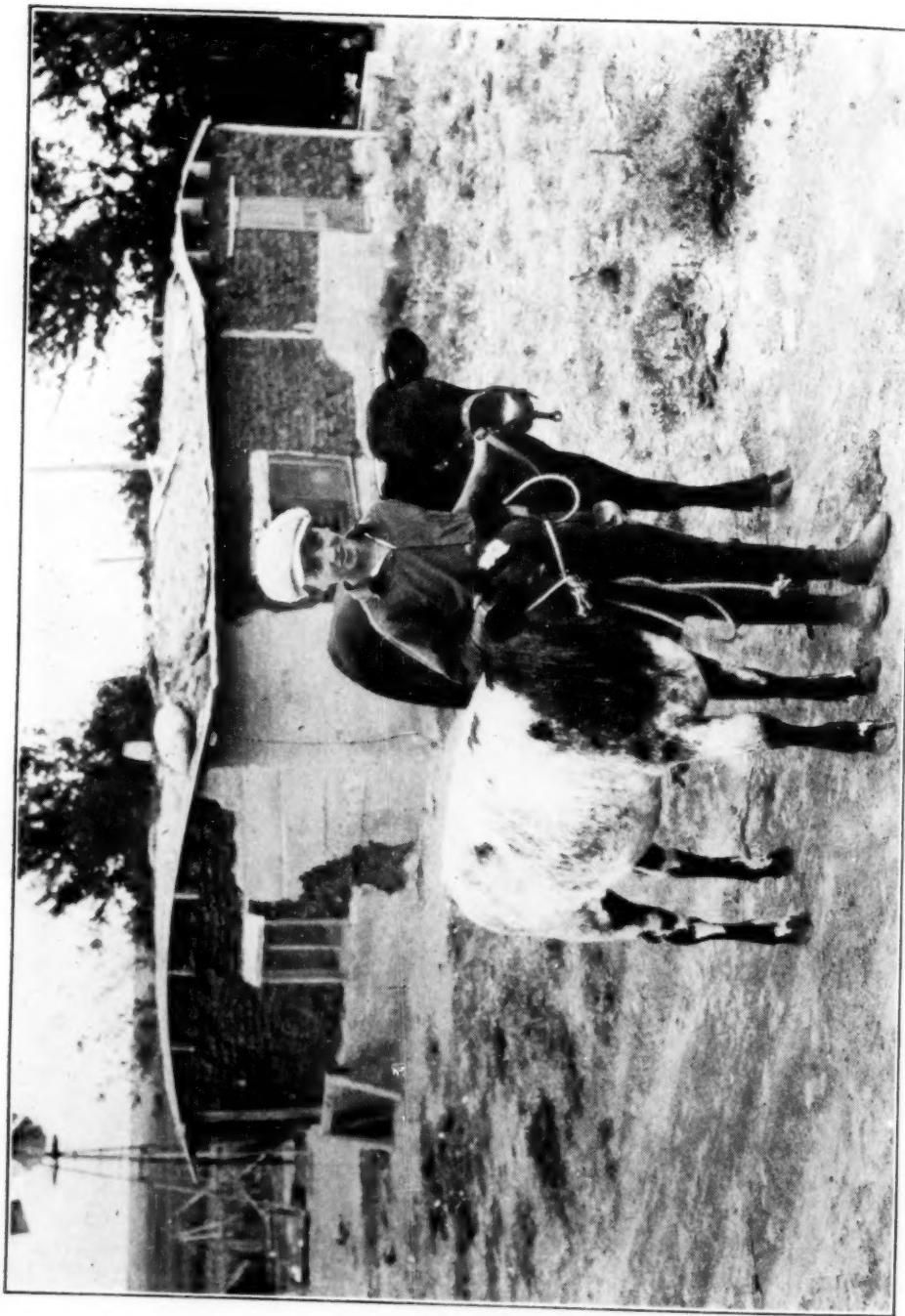
All this results eventually in raising the living and working standards on the farm and throughout the community. Intensive surveys made in four States showed that three out of every four farm families had made some improvement in farm or home practice as a result of the extension work. Especially valuable work has been done among the Negro farm people; they are characterized as being "teachable and appreciative."

The story of how home demonstration agents have influenced the civic and social life of hundreds of communities is an interesting one. Not only have



FIG. 5.—A 10-YEAR-OLD ALABAMA BOY AND HIS FIRST CLUB "PROJECT," A PUREBRED BERKSHIRE PIG

FIG. 6.—BABY BEEF STEER AND PUREBRED SHORTHORN HEIFER OF 4-H CLUB MEMBER. THE SOD  
HOUSE IS THE BOY'S HOME



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3P  
C.H.

entire families been aroused and interested in matters pertaining to the success of the home, but communities have joined together in many successful enterprises which can be directly traced to the inspiration and good judgment of the home-demonstration agent. From every State come reports of aroused interest in community responsibility. Civic beauty, social life and recreation, with the dealing with common problems of the community along many lines, have resulted from home-demonstration work.

Home-demonstration work in the 10-year period can be justly credited with the wide adoption in American farm homes of improved practices in feeding and clothing the farm family, household management, maintenance of family health, and the improvement and beautification of the home and its surroundings. Farm women whom this extension influence has reached have been enabled to set up and maintain a higher standard of living for their families. They have acquired greater pride in their homes and their household duties. They have increased their personal incomes through the intelligent standardization and marketing of surplus home products. They have learned to use the funds which they have for family expenditures more wisely and in terms of a more comfortable and attractive home life. They and their children are more simply and attractively dressed. Their family diet is more wisely and economically selected. Home conveniences, such as improved water supply, improved sanitation, better means of heating and lighting the house, have aided many farm women in doing away with much of the drudgery and monotony of farm life and have given them more time for recreation and for companionship with their children and neighbors.

Participation in extension activities has helped the farm woman to find a more active and important part in community life and improvement. Through extension influences she has learned to study and solve with other women of her locality the problems of the community of especial interest to them. Through constructive local leadership developed among the farm women, through their learning to plan and act together in local affairs, through the influence it has exerted in making the life of the farm and of the country community attractive and desirable, home-demonstration work beyond question has made a substantial contribution to American national life.

The need of improved conditions on the farm is shown by the fact that on 10,000 farms studied by the Department of Agriculture throughout the North and West 61 per cent of the farm women had to carry the water for household use a distance of 39 feet, only 32 per cent had running water in the house, 85 per cent had outdoor toilets, and only 20 per cent had bathtubs in the home. The working hours of these farm women averaged 11.3 hours per day.

2. The demonstration work and the conducting of club meetings develops leadership in the farm boys and girls. That this is so is demonstrated by some of the examples already cited.

3. As the boys and girls learn what can be done in their small projects they become eager to go on to other and wider subjects, developing a thirst for knowledge that has, in a great many instances, led to a college course in agriculture, often financed through club work. One of the most important achievements of the agricultural extension work is that it interests the children who have lost interest in regular school work and have dropped out. In the agricultural extension work the instruction comes to the child on his own farm, and there is none of the school atmosphere in the instruction and demonstration. "It does not deal with uninteresting books and theoretical things, but with live plants and animals, living processes, vital problems of the home, the farm, and the community."

4. The awakened interest in agriculture tends to make the young people look upon farming as their life job and to keep them on the farm. Since it is estimated that during 1925 there was a net loss of farm population to the city of 1,020,000 persons, the value to the

nation of training which will keep the farm child on the farm is obvious.

5. Thus the extension work helps, by keeping the young people at home, to solve the problem of the supply of labor for the farm.

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### Public Service Retirement Systems: Pennsylvania

INTEREST in the question of provision for old age, especially in regard to employees whose earnings hardly permit them to make it for themselves, has increased greatly within the last decade. Several States have passed old-age pension laws, and others are considering their passage. Employers are declaring that, aside from all ideas of humanity, it is good business policy to see that some provision is made for elderly employees, and the relative merits of industrial pension plans and group insurance are hotly discussed. Civil employees, whether State or municipal, have pressed their claim to be included in the movement, and a number of retirement systems for their benefit have been already established, while others are under consideration.

So many requests have been made of the Bureau of Labor Statistics for information concerning such systems that it has seemed worth while to prepare a report on their general features. Considerations of time and expense forbade making such a study complete in a geographical sense. Police and firemen's pension systems can be found in effect in almost every city of any size, and teachers' retirement systems, while not quite so general, are still very numerous. An inclusion of all such plans would involve endless duplication of detail with no corresponding benefit. A study of all state-wide systems, and of municipal systems in cities of a population of 400,000 or over would, it was felt, include practically all variations of pension or retirement plans, and would also give some idea of the relative value of different systems.

There are at present six States in the Union with retirement plans covering all State employees not included in some other pension plan. Twenty-one States and the District of Columbia have plans which include—or may include—all teachers in the public employ. Eighteen cities, according to the estimate of the Census Bureau, have in 1927 a population of 400,000 or over. The survey would thus include plans maintained by 46 agencies, covering employees ranging from laborers to high executive, administrative, and professional officials, and this, it was felt, would be a sufficiently wide inquiry to cover most significant variations of the plans now in use.

A complete study of these plans from an actuarial standpoint would be a formidable task as to both time and cost involved, so it was decided to undertake a more modest program. The plan adopted was to learn for each system such important facts as the kinds of employees covered, what difference is made between different classes, the source of the funds, with the division of the cost between the employees and the public authorities, the conditions under which retirement on pension is permitted, what provision, if any, is made for dependents of deceased employees, the practice in regard to retire-

ment for disability, the average age and years of service of those retiring, the income and outgo of the fund for the latest year reported upon, if possible the total cost of the system since its inauguration, and such other matters as may throw light upon the advantages or disadvantages of a given plan.

This investigation is at present under way. To meet the inquiries which the bureau is continually receiving, it has been decided to publish some partial reports, merely to show what are the leading features of existing plans and how successfully they work out in practice. In this preliminary report no effort will be made to group together systems dealing with the same kind of employees or embodying the same features. Plans prevailing in a given State or district will be briefly described, and two or three plans in each district, embodying different principles, will be selected for fuller discussion.

#### Basic Classification of Retirement Plans

THERE are two particulars in which retirement plans differ fundamentally—the source of the funds by which they are maintained and the method by which provision is made for meeting the liabilities assumed. As to the first, plans may be either contributory or noncontributory; as to the second, they may be managed either upon the cash disbursement or the actuarial reserve system.

Under the contributory system each employee contributes regularly from his salary or wages a fixed amount or a specified percentage which is designed to meet his share of the retirement allowance to which he will be entitled upon fulfilling the conditions for retirement laid down by the plan; under the noncontributory system the employer bears the full cost. Noncontributory plans are unusual, especially among the systems installed in more recent years.

Under the cash-disbursement system retirement allowances are paid from whatever funds are in hand, which, in practice, means from the contributions of the employees as long as these are sufficient to meet the demand, and when they fall short the employer undertakes to make up the deficiency. During the early years of a system's operation the employees' contributions are usually more than sufficient for its needs, but gradually the increasing pension roll demands heavier and heavier annual payments, the contributions of the employees are progressively inadequate to the situation, and the State or city finds its contribution rapidly increasing.

Under the actuarial reserve system a fund is established and the employer, like the employee, pays into this regular contributions. The rate of contribution is so calculated that the fund annually receives an amount which, invested at compound interest, will be sufficient to pay each employee when his time of retirement comes the share of the retirement allowance due for one year's services. By this plan, after a system is once installed, the liabilities accruing during a given year are met by the contributions paid in during that year. Each employee's contributions are used to pay his share of his own retirement allowance, and the fact that the amounts deposited each year are invested at compound interest makes the final cost much less than if the employee's contributions were used to pay the allowances of those retiring before him and the employer made no contribution until the time of payment came.

Whatever the system adopted, a question arises as to the retirement allowances of those already in the service, especially if they have been there for some time. Service rendered after the adoption of a contributory system is supposed to be provided for by the annual contributions, but there is an accrued liability for earlier service which must be met somehow. No system begins by turning off old employees without an allowance, or with the meager allowance provided by the few years of service they can give between its adoption and their retirement. A common method of meeting the situation is for the employing agency to assume the responsibility for the years of prior service, paying the full retirement allowance for them, while the years after the adoption of the plan are covered by the combined contributions of employer and employee. Under this arrangement, those remaining in a system have no responsibility whatever for those retiring at or soon after its establishment.

#### Retirement Systems in Pennsylvania

PENNSYLVANIA has two State and six city retirement systems of interest from the standpoint of this study. Neither of the State systems has been in existence for a decade; the municipal systems are older, several dating back to the last century. The State systems are both actuarial reserve plans, while the city systems are all managed on the cash-disbursement plan. Differences in the requirements as to age and years of service, provision for dependents, and kind and amount of retiring allowance paid are marked.

##### State Employees' Retirement System

The Pennsylvania State Employees' Retirement System was established under an act signed June 27, 1923, and contributions and retirements began in 1924. As yet no report of its work has been published, though one is now in preparation and is expected to appear in a few months.

*Scope of plan.*—The plan covers all holding a State office or employed by the year or the month, excepting judges and those who are covered by the State school employees' plan. Membership is compulsory, after 12 months' service, upon all entering the State service after December 31, 1924. Those in service when the plan was adopted were given the option of joining or remaining outside. The time during which they might exercise this option has been extended to December 31, 1928, but those who did not decide to enter within a year after the plan went into operation must, if they come in later, make up the contributions they would have paid during the interval.

*Administration.*—The system is administered by a board of five consisting of the secretary of the State, the State treasurer, one member appointed by the governor, and two members belonging to the system and elected by their fellows.

*Contributions from the employees.*—The employee has the right to choose between two rates of contribution, the first of which is calculated to produce upon retirement at 60 an annuity of one one-hundred-and-sixtieth of the average salary for the last five years multiplied by the years of service, while the second gives a similar annuity of one

one-hundredth. Most employees choose the higher rate. The rates are based upon the employee's age on entering the system and are as follows:

TABLE 1.—PER CENT OF SALARY DEDUCTED AS CONTRIBUTION TO FUND UNDER PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM

Age at entrance	Per cent of salary deducted under—		Age at entrance	Per cent of salary deducted under—		Age at entrance	Per cent of salary deducted under—	
	Rate 1	Rate 2		Rate 1	Rate 2		Rate 1	Rate 2
20.	2.68	4.28	34.	3.73	5.97	48.	5.08	8.13
21.	2.74	4.39	35.	3.82	6.11	49.	5.19	8.30
22.	2.81	4.50	36.	3.91	6.25	50.	5.30	8.49
23.	2.88	4.61	37.	4.00	6.39	51.	5.41	8.66
24.	2.95	4.72	38.	4.09	6.54	52.	5.52	8.84
25.	3.02	4.84	39.	4.18	6.68	53.	5.64	9.02
26.	3.10	4.95	40.	4.27	6.84	54.	5.76	9.21
27.	3.17	5.07	41.	4.37	6.99	55.	5.87	9.40
28.	3.25	5.20	42.	4.45	7.15	56.	5.99	9.59
29.	3.32	5.32	43.	4.56	7.30	57.	6.12	9.79
30.	3.40	5.44	44.	4.66	7.46	58.	6.24	9.98
31.	3.48	5.57	45.	4.77	7.63	59.	6.36	10.18
32.	3.57	5.70	46.	4.87	7.79	60.		
33.	3.65	5.84	47.	4.97	7.96			

An employee who has contributed for 10 years may, upon reaching the age of 60, cease making contributions if he chooses, but in that case his retiring allowance will be proportionately smaller.

*Contributions from the State.*—The State contributes for each employee a sum equal to his own contributions, so that each year a sum is put away entitling him to a retiring allowance made up of his own annuity plus the State's pension, amounting on retirement to either one-eightieth or one-fiftieth of his final average compensation, multiplied by the number of years served since entering the system. For those who were in the service before the retirement system went into effect the State makes a further contribution to provide both annuity and pension for the years served prior to 1924.

The State also bears the full cost of administering the system.

*Conditions for retirement.*—Retirement for service is permitted at 60, after 25 years of service. No age has been set for compulsory retirement. Retirement for disability is permitted, after five years' service, for physical or mental incapacity rendering the employee unfit for the discharge of his duty. Medical certification of the incapacity is required.

*Retirement allowances.*—For service retirement, the allowance consists of annuity plus pension to equal, for each year of service, either one-eightieth or one-fiftieth of the final compensation. Since most of the employees choose the higher rate, those with 25 years of service to their credit retire with an allowance of at least one-half their final average compensation. For instance, an employee retiring under such circumstances whose salary for the last five years has been \$1,500 per year would receive an annual allowance of \$750 if he had chosen the higher rate, and of \$468.75 if he had taken the lower. There is no minimum or maximum on this allowance, except as it is determined by the salary received. If the employee serves for more

than 25 years and continues to pay contributions while in the service his allowance will be proportionately greater.

The disability allowance for those retiring as disabled before reaching 60 is one-ninetieth of the final compensation for each year of service in the State. The minimum is 30 per cent of the final salary, and the maximum is eight-ninths of the allowance the employee would have received had retirement not occurred until the superannuation age of 60 had been reached.

**Options:** Instead of taking his straight allowance the retiring employee may elect to receive a smaller annuity, pension, or allowance, with the proviso that—

1. If the recipient dies before receiving what was, at the date of retirement, the present value of the whole allowance, the balance shall be paid to a beneficiary, having an insurable interest in his life, formally designated at the time of retirement; or

2. The annuity, pension, or retirement allowance shall be paid to such a designated beneficiary throughout his or her life; or

3. One-half of the annuity, pension, or allowance shall be continued to such a beneficiary throughout his or her life; or,

4. "Some other benefit or benefits shall be paid to either the contributor or such other person or persons as he or she shall nominate, provided such other benefit or benefits shall, together with such lesser member's annuity, or lesser State annuity, or lesser retirement allowance, be certified by the actuary of the retirement board to be of equivalent actuarial value, and shall be approved by the retirement board."

**Refunds.**—If an employee is discharged or resigns before reaching pensionable status he is entitled to a return of all the contributions he has made, with compound interest at 4 per cent. If he prefers, he may take instead either an annuity, or a deferred annuity, not to exceed in value the actuarial value of his contributions.

**Provision for dependents.**—This matter is covered by the options given on retirement. If the retiring employee fails to take one of them the State assumes no responsibility for any dependents he may have.

#### Pennsylvania School Employees' Retirement System

The law authorizing this system was approved July 18, 1917, and the plan began operation July 1, 1919. Under the law local retirement systems might be merged in the State system whenever two-thirds of the local membership desired and the local school board approved the action. In 1917 there were 13 local systems in the State, but by July, 1919, these had all taken the necessary steps and were members of the State system when it came into effect.

**Scope of system.**—The system covers not only teachers but all persons employed in the public schools, the State normal schools, and the State institutions for the deaf, dumb, and blind, together with all who are in any employment connected with the public-school system of Pennsylvania. There are two classes of members—present employees, who were in the school service prior to July 18, 1917, and new entrants, who came in after that date. Membership is optional for present members and compulsory upon new entrants.

**Administration.**—The system is in the charge of a board of seven members, consisting of the State superintendent of public instruc-

tion, the State treasurer, an appointee of the governor, three elected by school employees who are members of the system, and one elected annually by the other six members of the board.

*Contributions from the employees.*—The employees' contributions are determined by the age at which they enter the system and consist of deductions from their salaries or wages, up to and including \$2,000 per annum, of percentages calculated to produce at age 62 an annuity, for each year of their service, of one one-hundred-and-sixtieth of the average compensation for the last 10 years of service. The rates of deduction differ as between men and women, but not as between different classes of employees. Employees who choose to remain in service after reaching 62 are not required to pay further contributions. (For rates of contribution, see p. 18.)

*Contributions from the State.*—The State contributes for each member of the system an annual amount sufficient to provide at age 62 a pension of one one-hundred-and-sixtieth of final average compensation for each year of service.

The State makes a further contribution semiannually to meet the accrued liability for service rendered before the system went into effect. All employees fare alike as to service rendered since the retirement system came into effect, but for those who were employed prior to that time the State bears the cost of providing the whole allowance for each year of such prior service. It was originally calculated that the State could meet this whole accrued liability within 30 years by making semiannual contributions of 2.8 per cent of the total pay roll of all school employees. In practice, due partly to the increase in salaries since the law was passed, it was found that the liability was being met more rapidly than had been expected or than was necessary, and in April, 1925, the law was amended so that the semiannual payments were reduced to 2 per cent of the total pay roll, the reduction taking effect July 1, 1925.

While these contributions are made directly by the State, they are raised by the State and the local school district in which each employee is engaged, each contributing half.

The State bears the whole cost of administering the system.

*Conditions for retirement.*—Service retirement or superannuation: An employee with at least 10 years' service to his credit may retire at 62. Retirement is compulsory at 70.

Disability retirement: An employee under 62, with at least 10 years' service to his credit, is eligible for disability retirement if physically or mentally incapacitated for his occupation. If such incapacity develops after 62 the employee is retired under the service or superannuation provision.

*Retirement allowances.*—The service retirement allowance is made up of the annuity purchased by the employee's contributions, plus a pension purchased by the State's contributions, the two together making approximately one-eightieth of the final average compensation for each year of service. In the case of present employees the State pays both pension and annuity for the years of service rendered before the adoption of the system.

*Options.*—At the time of retirement the employee is permitted to choose, instead of the straight allowance, one of four options, prac-

tically identical with those offered to members of the State Employees' Retirement System (see p. 14).

*Disability benefits.*—If retired for disability, the employee receives for each year of service an allowance of one-ninetieth of the final average compensation, with a minimum of 30 per cent of the final compensation. This minimum does not apply to those who began service after 35, their minimum being set at eight-ninths of the amount they would have received had they continued to serve until 62.

*Refunds.*—In case of death before reaching pensionable status the employee's contributions are returned to his estate with 4 per cent compound interest. If he resigns or is discharged he may either have his contributions returned with 4 per cent compound interest or leave them and receive instead an annuity or a deferred annuity which is the equivalent in value of the accumulated contributions.

#### *Growth of system*

When the system commenced operations on July 1, 1919, it had a membership of 37,503, which included 90 per cent of the teachers of the State. On June 30, 1925, the latest date for which complete figures are available, the active membership was 58,409. The membership, however, fluctuates considerably during the year.

Attention should be called to the fact that in many districts the successors to the school employees who separated from school service at the end of the 1924-25 school term and who withdrew from the retirement system prior to June 30, 1925, had not been elected on that date, and the net membership as of June 30, 1925, was, therefore, considerably less than the actual membership after all vacancies had been filled for the 1925-26 school term. The total active membership on December 1, 1925, had passed 60,000.<sup>1</sup>

Up to June 30, 1925 a total of 1,580 retirement allowances had been granted, of which 1,183 were for superannuation and 397 were for disability; 179 superannuation and 67 disability annuitants had died, 37 superannuation and 82 disability annuitants had returned to active service, and 9 disability annuitants had withdrawn from the system. The total number retired each year for superannuation and for disability, the net number surviving as annuitants on June 30 of each year, and the total amount paid yearly to each class in retirement allowances, are shown in the following table:

TABLE 2.—NUMBER RETIRED, NUMBER ON ROLLS, AND AMOUNTS PAID IN ANNUITIES EACH YEAR, 1920 TO 1925, UNDER PENNSYLVANIA SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Year ending June 30—	Number retired during year			Number on rolls June 30			Amount paid during year		
	For super- annua- tion	For disa- bility	Total	Retired for su- peran- nuation	Retired for disa- bility	Total	To super- annuation annuitants	To disa- bility an- nuitants	Total
1920.....	204	50	254	193	42	235	\$25,724	\$5,893	\$31,617
1921.....	264	67	331	427	93	520	121,042	19,617	140,659
1922.....	167	74	241	565	135	700	164,899	32,721	197,620
1923.....	168	62	230	690	167	857	223,935	44,471	268,406
1924.....	154	65	219	796	195	991	282,227	55,766	337,993
1925.....	226	79	305	967	239	1,206	348,365	74,258	422,623
Total.....	1,183	397	1,580	.....	.....	1,206	1,166,192	232,726	1,398,918

<sup>1</sup> Pennsylvania, State School Employees' Retirement Board. Sixth annual report for the year ending June 30, 1925. [Harrisburg, 1926?], p. 3.

A comparison between the number of annuitants at the end of each year, as shown here, and the net membership of the system at the same date, gives the following table:

TABLE 3.—RELATION OF ANNUITANTS TO NET MEMBERSHIP, 1919 TO 1925

Data as of June 30—	Net membership of system	Number of annuitants	Per cent annuitants form of membership
1919	37,503		
1920	38,468	235	0.61
1921	42,007	520	1.23
1922	46,156	700	1.52
1923	50,914	857	1.68
1924	54,677	991	1.81
1925	58,409	1,206	2.07

In considering these percentages it is well to bear in mind the difference, as explained above, between the membership of the system on June 30 and in the middle of the school year, as this would materially affect the relation between the number of annuitants and the membership.

*Increase in average amount of annuities.*—The increase in the annual amount paid out in retirement allowances is due not only to the greater number of annuitants, but also to the growing size of the retirement allowance. The allowance is calculated on the average compensation for the last 10 years of service. In the early part of the present decade there was a general movement for higher wages and salaries to offset the increased cost of living, and the effect of this is visible in the annuities paid. The following table shows the change in this respect since the system went into effect:

TABLE 4.—AVERAGE SUPERANNUATION AND DISABILITY ANNUITIES

Year ending June 30—	Average superannuation annuities		Average disability annuities	
	For year	Over whole period of operation	For year	Over whole period of operation
1920	\$284.31	\$284.31	\$263.05	\$263.05
1921	401.01	350.14	276.51	270.76
1922	408.82	365.67	273.10	271.67
1923	412.17	375.32	287.24	275.48
1924	446.37	386.76	323.00	285.19
1925	555.96	419.08	399.01	307.84

The average allowance for the superannuated employee retiring in 1925 was nearly twice as large as for those retiring in 1920 (95.5 per cent greater), while for those retired on account of disability the average is larger by 51.7 per cent.

*Age and length of service of retiring employees.*—The following table shows these facts for those retiring in each of the six years covered:

TABLE 5.—AVERAGE AGE AND LENGTH OF SERVICE OF ANNUITANTS

Year ending June 30—	Superannuation annuitants		Disability annuitants	
	Average years of service	Average age	Average years of service	Average age
1920	33	70	25	40
1921	33	69	25	40
1922	33	67	24	40
1923	37	67	24	40
1924	37	67	25	40
1925	33	67	25	40

The high average age of those retiring as superannuated in the first year shows the operation of the compulsory feature; those who had reached or passed 70 were obliged to withdraw. Inasmuch as retirement is permitted at 62, the average age of those retiring through the whole period shows that few wish to leave as soon as possible.

The contributions from State and employees are calculated to provide a retiring allowance, after 40 years of service, of one-half the average final compensation. So far, the average term of service has fallen short of this, though the difference is strikingly small. A failure to fulfill the 40 years of service is, of course, reflected in a smaller retirement allowance.

*Contributions and funds.*—The employee's contributions are calculated to produce one one-hundred-and-eightieth of the final average compensation for each year of service. The percentage of salary deducted for this, according to sex and age at time of entering the system, is shown in the following table:

TABLE 6.—PER CENT OF SALARY DEDUCTED AS CONTRIBUTION TO FUND

Age at entrance into service	Men	Women	Age at entrance into service	Men	Women	Age at entrance into service	Men	Women
18	3.33	3.69	33	3.49	4.07	48	4.20	5.10
19	3.33	3.71	34	3.51	4.11	49	4.27	5.20
20	3.33	3.74	35	3.55	4.16	50	4.34	5.29
21	3.33	3.75	36	3.58	4.21	51	4.41	5.40
22	3.34	3.78	37	3.62	4.27	52	4.49	5.50
23	3.34	3.79	38	3.65	4.32	53	4.57	5.61
24	3.34	3.81	39	3.70	4.38	54	4.64	5.72
25	3.35	3.83	40	3.74	4.45	55	4.73	5.83
26	3.36	3.85	41	3.79	4.52	56	4.81	5.94
27	3.37	3.88	42	3.84	4.59	57	4.90	6.07
28	3.38	3.90	43	3.89	4.67	58	4.98	6.18
29	3.40	3.93	44	3.95	4.75	59	5.08	6.31
30	3.42	3.96	45	4.01	4.83	60	5.16	6.42
31	3.44	4.00	46	4.07	4.92	61	5.30	6.59
32	3.46	4.03	47	4.14	5.01			

The total amounts contributed annually by the employees, and the amounts paid in during the same period by the State and the local school districts to meet their liabilities for those already in the service when the plan was adopted were as follows:

TABLE 7.—CONTRIBUTIONS OF EMPLOYEES, STATE AND LOCAL SCHOOL DISTRICTS, BY YEARS, 1920-1925

Year ending June 30—	Contributions of employees	Amounts paid for persons already in service by—	
		Local school districts	State
1920	\$1,305,712	\$641,118	
1921	1,615,105	869,618	\$691,219
1922	1,994,411	737,342	
1923	2,284,755	1,391,606	1,224,209
1924	2,451,093	1,790,383	392,355
1925	2,711,994	1,855,152	4,358,776
Total	12,363,070	7,285,309	6,666,558

On behalf of those who have entered the service since the adoption of the system, the State has paid \$1,474,407 and the local school districts \$1,582,957.

The item of interest makes an important addition to these various contributions. By June 30, 1925, interest on investments and bank deposits of funds paid in by the employees amounted to \$1,158,611, on the funds paid in by State and local school districts on behalf of those employed when the system was inaugurated to \$985,672, and on their payments for those entering the service after June 30, 1919, to \$17,878.

Including in the accounts the amounts refunded to employees leaving the service, the return of these refunds by employees who returned after leaving, amounts paid out for investments and received from maturing investments, etc., the total receipts of the system from July 1, 1919, to June 30, 1925, amounted to \$33,973,869, and the total expenditures to \$5,455,016, leaving a balance on June 30, 1925, of \$28,518,853.

#### Pension Systems of Philadelphia

PHILADELPHIA has three major systems, the police, the firemen's, and the municipal employees' pension systems, all managed on the cash disbursement plan. The police and firemen's systems both date back to the past century, while that of the municipal employees was established in 1915.

##### Firemen's Pension System

The Firemen's Pension Fund of Philadelphia was incorporated January 6, 1891, under a law passed in 1874 permitting such incorporation. Membership, which is limited to "the active uniformed male members of the fire-fighting force," is optional in theory, but in practice all eligible members belong and are expected to belong. The fund is managed by a board of 4 officers and 11 directors elected by the members of the system; representatives of the city council are ex-officio members.

Each active member contributes to the fund one day's pay a month, and pensioners contribute one-half day's salary, taking the rate they were receiving when they retired as the basis of this contribution.

The State gives 2 per cent of the tax paid by outside insurance companies operating in the State, and the city binds itself to make up whatever amount may be needed to maintain payment of pensions. Up to a few years ago the city had no responsibility in the matter, and both firemen and policemen raised money for their systems by giving benefits and entertainments of one kind and another, for which members of the forces sold tickets. Some sentiment grew up against this method, and the practice was given up, the city assuming the responsibility of seeing that the funds should not come to grief.

Retirement is permitted at 45, after 20 years' service, but in practice none retire before 50, and the average age is over this. Disability retirement is permitted, without conditions as to age and service, in case of permanent incapacity due to injuries received in the line of duty. Medical certification of disability is required, and the approval of the board is a prerequisite for retirement, whether for service or disability.

The pension, whether for service or disability, is one-half of the average annual salary for the last four years of service. If a member dies or leaves the service before reaching pensionable status there is no refund of his contributions. If he dies, however, whether or not he was on the retired list, his widow is given a pension of \$20 a month as long as her widowhood continues, and \$6 a month is allowed in addition for each child under 16, provided that the combined allowance of widow and children must not exceed one-half of the salary the member was receiving at the time of his death.

In June, 1926, the system had 2,100 members and carried 350 pensioners. The income of the fund during the year ending December 31, 1925, excluding maturing investments and similar bookkeeping additions, was \$566,127, of which \$122,136 came as contributions from the members and pensioners during the year, and \$366,278 represented the State's contribution for 1924 and 1925. Payments to pensioners during 1925 amounted to \$191,716; expenses of administration were \$1,604.

#### Police Pension System of Philadelphia

In its general features the police pension system closely resembles that of the firemen. It was chartered in 1890 and began paying pensions in March, 1892. Membership is compulsory upon policemen of all grades, police hostlers, and such of the city hall guards as are not covered by the municipal employees' system. It is managed by a board of 16 directors elected by representatives of the members, with the customary officers; representatives of the city council are ex-officio members. The costs of administering the system are not separated from other costs of the police department.

Each member contributes one day's pay a month to the fund, but any part of a salary in excess of \$3,000 a year is not taken into account. The city makes no regular contribution, but when a few years ago the practice of giving benefits and entertainments was given up, the city bound itself to contribute whatever might be necessary to maintain the system in operation. In addition, the fund receives what is known as "detail money"—that is, the amount paid by building and construction companies for special officers detailed at their

request to watch buildings under construction and prevent mischief or theft.

Retirement is permitted at 50, after 20 years' service. There is no compulsory age for retirement. Retirement on pension is permitted for two kinds of disability: Ordinary disability, in which 10 years of service must have been rendered before a pension will be given; and disability due to injuries received in the line of duty, for which no requirement is made as to time of service. The retirement allowance, whether for service or disability, is one-half of the average pay for the last 10 years of service, with a maximum of \$1,500 a year. No minimum is set. In case of death or withdrawal before reaching pensionable status, there is no return of contributions. In case of the death of a member or pensioner, if the death is the result of injuries received in the discharge of duty, the widow receives a pension of \$20 a month during widowhood, and \$6 a month is allowed for each child under 14. For dependent parents, \$12 a month is allowed.

At the close of 1926, the system covered approximately 5,600 employees, and carried 869 pensioners, of whom 795 were retired members, and 74 were dependents of deceased members. The number pensioned each year for the last five years, their average age, and their average length of service, are as follows:

TABLE 8.—NUMBER, AVERAGE AGE, AND LENGTH OF SERVICE OF ANNUITANTS

Year	Number pensioned	Average age (years)	Average length of service
1922	62	54.8	26 years 7 months.
1923	32	55.9	25 years 7 months.
1924	133	57.8	27 years 1 month.
1925	55	52.2	
1926	62	56.1	24 years 4 months.

While the range of pensions is considerable, the average for retired members of the force is very close to \$50 a month. At the close of 1924, data were published showing that the average duration of a pension had been, for retired members, 7 years, 2 months, and 15 days; for widows of deceased members, 8 years, 3 months, and 7 days; and for dependent children, 4 years, 11 months, and 16 days.

From the beginning of the system up to the early part of the present decade, the police, like the firemen, raised money for their funds by benefit entertainments, ball games, and the like, for which they sold tickets. In the early days, also, the annual contributions were larger than the annual pension outlay, so that from both sources reserve funds were accumulated, and the interest on these helped to increase the income. When the entertainments were given up, the discrepancy between income and outgo at once became troublesome. The city's contributions have not been sufficient to meet the deficit and the reserve funds have been utilized for this purpose. According to figures made public by the secretary of the fund, in 1924 there was a deficit of \$74,702 and in 1925 a deficit of \$93,195. In the spring of 1926 the officials of the system served notice that unless the city increased its contributions, the reserve funds would be almost wiped

out during that year and a reduction of the pensions paid would become necessary. For 1926 receipts and disbursements were as follows:

Receipts:	
Dues from members	\$304, 475
Interest on investments	3, 766
Interest on deposits	1, 366
Details	8, 255
Contributions	17, 543
City appropriation	100, 000
Total	<u>435, 405</u>
Disbursements:	
Paid out in pensions	522, 627
Expenses	11, 992
Premiums and discounts	1, 453
Total	<u>536, 072</u>
Deficit for year	100, 667

From the inauguration of the system to December 31, 1925, a total of \$7,407,275 had been paid out in pensions to 1,688 retired members, 75 widows, 79 children, and 6 dependent parents. The pensions paid in 1926 brought this amount up to \$7,929,903.

#### Municipal Employees' Pension System of Philadelphia

This system, which covers employees of the county as well as of the city of Philadelphia, was organized in 1915 under an act passed in that year. Contributions began on July 1, 1915, but no pensions were paid until January, 1917, thus permitting the accumulation of funds before payments should begin.

*Scope of plan.*—The plan applies to all employees of the city or county of Philadelphia except temporary employees, and those covered by some other pension plan authorized by State laws. Membership is compulsory upon salaried employees and optional for per diem workers.

*Administration.*—The fund is managed by a board of five, consisting of the mayor, the city treasurer, the city controller, and two members of the city council, one from each branch, elected by their fellow members.

*Contributions.*—The members contribute 4 per cent of their salary or wages, with a maximum of \$4 a month. The contribution was originally set at 2 per cent, but in July, 1917, the act was amended to make the percentage 4. If an employee is retired before he has completed 20 years of service, he must contribute 4 per cent of his pension until the service period has been made up. The city undertakes to contribute amounts sufficient to maintain the payment of pensions, and in addition, to bear the cost of administering the fund.

The fund receives the usual items of interest on deposits and investments, profit on investments, and the like.

*Conditions for retirement.*—Retirement is permitted at 60, after 20 years' service. No age is set for compulsory retirement. If an employee has completed 20 years of service before reaching 60, and

wishes to withdraw, he may do so without forfeiting his pension rights, provided he continues his contributions until he reaches 60.

Retirement is permitted for permanent disability after 20 years of service, or for total disability after 15 years of service, if the applicant has been a contributor to the fund for 5 years or more. Medical certification of disability is required.

*Retirement allowances.*—The retirement allowance, both for service and for disability retirement, is 50 per cent of the average annual salary or pay for the last 5 years of service, with a maximum of \$1,200 a year.

*Refunds.*—Upon the death or withdrawal of a contributor before reaching pensionable status, his contributions, without interest, will be paid to him or to his estate. No provision is made for dependents, except that in case of the death of a pensioner, his pension for the month in which death occurs will be paid to his family.

*Statistics of system.*—No separate report is published for the fund, but some data concerning it are included in the annual reports of the city controller. As in the case of the State school employees' fund, the number enrolled varies considerably from time to time, but since, in the case of the municipal system, no actuarial valuations are required, there is no necessity for calculating either the number of members at a given time, or the mean membership through the year. No figures as to this item can be given, therefore, but the following tables give some indication of the progress of the fund:

TABLE 9.—PENSIONERS, AVERAGE PENSIONS, AND TOTAL NET PENSION PAYMENTS UNDER PHILADELPHIA MUNICIPAL EMPLOYEES' PENSION SYSTEM<sup>1</sup>

Year	Number of pensioners	Average pension paid (per month)	Net payments in pensions	Year	Number of pensioners	Average pension paid (per month)	Net payments in pensions
1917	200		\$74,585	1922	362	\$40.94	\$177,686
1918	241		108,547	1923	398	40.97	195,674
1919	257		121,988	1924	442	46.47	246,649
1920	305	\$38.27	140,054	1925	487	49.28	270,525
1921	336	35.94	144,917	1926	534	50.81	306,119

TABLE 10.—EMPLOYEES' CONTRIBUTIONS TO FUND, 1917 TO 1925<sup>1</sup>

Year	Contributions	Withdrawals	Year	Contributions	Withdrawals
1917	\$169,046	\$28,500	1922	\$230,091	\$58,307
1918	173,617	55,577	1923	226,840	76,763
1919	183,780	33,183	1924	265,489	79,456
1920	200,318	62,012	1925	295,109	78,776
1921	220,698	40,860	1926	312,782	82,543

<sup>1</sup> The above data from 1917 to 1925, inclusive, were copied from the annual reports of the controller of the city of Philadelphia. Those for 1926 are advance figures furnished through the courtesy of the officials of the fund, and are subject to correction when the final report appears.

Up to the close of 1926, a total of 896 applications for retirement had been made, and of these 851 had been approved. The average age at retirement was estimated as around 63 years, and the average years of service as 25. It will be noticed that though the average monthly pension in 1926 was considerably higher than in 1920, even

at the later date it amounted to but one-half of the permitted maximum. The most striking feature of the figures given is the discrepancy between the increase in the contributions and the pension payments; in 1926 the contributions were larger by 85 per cent than in 1917, while the pension outlay had increased by 310 per cent.

The assets of the fund at the end of each year after it began full operation were as follows:

1917	\$288, 844	1922	\$446, 683
1918	324, 467	1923	419, 030
1919	366, 456	1924	425, 130
1920	379, 947	1925	436, 037
1921	432, 568		

Up to the close of 1922 the assets show a continuous growth, but at the close of 1923 the reserve fund was smaller than it had been 12 months earlier. Probably it was in response to this movement that among the next year's receipts appears the item: "Appropriation by city council, \$50,000." This is the first time since the payment of pensions began that any contribution from the city appears in its accounts. In 1925 a similar appropriation was made. With the aid of these appropriations the reserve shows a slight increase in each of these years, but it is so small as to suggest that much larger appropriations will be needed in the near future.

# INDUSTRIAL RELATIONS AND LABOR CONDITIONS

## International Competition in Labor Conditions and the Maintenance of Labor Standards<sup>1</sup>

By LEIFUR MAGNUSSON, DIRECTOR WASHINGTON BRANCH, INTERNATIONAL LABOR OFFICE

**C**OMPETITION in international labor conditions is a natural and obvious concomitant of trade competition. The mere act of selling in world markets involves not only the question of relative advantage in raw materials and power resources, but also the labor factor.

The importance of the labor factor may be more concretely indicated in various ways. Take, for example, the facts as to the differing efficiency and effectiveness of labor in different parts of the world. Professor Taussig brought together some vivid data showing the output per worker over given periods in some leading lines. In the production of cement, output per worker was as 2 to 1 between United States and Great Britain; in sugar about the same; flour 3 to 2; steel 3 to 1; pig iron 2 to 1.1. Production of window glass per square meter in Sweden, Belgium, United States (hand and machine manufacturing), indicates a direct relationship between output and time worked. Thus, the output in square meters per worker is 10 in Sweden, 11 in Belgium, 16 in the United States for hand-blown glass and 21 for machine-process glass. However, in money costs (per 100 square feet), the Swedish cost is \$3.03 against the American \$3.69, while the Belgian cost is \$2.41. In Japan the worker produced 104 pounds of yarn per day against the American output of 414 pounds; the Japanese weaver 145 yards, the American 450 on plain looms and 1,100 on the automatic. "A Japanese cotton mill requires approximately four times as many employees for the same amount of machinery as does a similar American mill."<sup>2</sup> But Japanese wages are not as 1 to 4 compared with American wages, but rather as 1 to 8. A Japanese weaver in 1923 earned 10.5 sen (5 to 6 cents)<sup>3</sup> per hour against estimated full-time earnings of an American weaver of 40 to 44 cents per hour.<sup>4</sup> It is not strange, therefore, to find that a report of the Tariff Commission in 1921 gave as a principal advantage favor-

<sup>1</sup> Extracts from article in June, 1927, issue of *American Labor Legislation Review*.

<sup>2</sup> Quarterly Journal of Economics, November, 1924; "Labor costs in the United States," by F. W. Taussig.

<sup>3</sup> International Labor Office. *Wage Changes in Various Countries, Geneva, 1926*, p. 99.

<sup>4</sup> U. S. Bureau of Labor Statistics Bul. No. 371.

ing the Japanese cotton industry "the low standard of living and wages prevailing in that country."<sup>5</sup>

An equally striking illustration of the labor differential arises somewhat nearer home. It was something of a shock to read in the press recently the declaration of New England manufacturers that what they required if their industry was to survive in that section of the country against southern competition was freedom to work woman employees longer hours and opportunity to hire child workers below fixed standards. Here was the labor differential in human terms, in hours of work, night work, and employment of children; in short, in violation and breakdown of accepted standards. These manufacturers may be entirely correct in their position as respects their relative costs of production in comparison with the southern mills. The labor differential is admittedly a controlling factor, and clearly raises the question as to whether or not labor is to be considered, in the language of the treaty of peace, merely a commodity or an article of commerce.

Without taking any more time, therefore, in setting forth what is in reality a platitude, that labor differentials are vital factors in trade and commerce, whether international, national, regional or local as between establishments, it may be helpful to indicate a few of the postwar developments which to my mind enhance the importance of the labor factor.

#### Present-Day Importance of Labor Differential

FIRST of all, there has been the rapid industrialization of areas hitherto relatively agricultural or only nascently industrially developed. Japan obviously is the classical example. Between 1909 and 1922 the number of factories in Japan increased 44 per cent; the number of workers 111 per cent. In India the rise of the cotton industry has been equally phenomenal. In both these countries and in China an excellent measure of the rapid industrialization is the heavy increase in cotton-mill machinery imported, indicating the potential competitive force of the Orient. Even the hitherto unexploited areas in Africa have come into the foreground with the new system of mandates, and a future of comparatively rapid industrial evolution is ahead. Native labor is coming to play a part in the economy of the world as it has never done before. In short, the period since the World War has witnessed the constant enlargement of the area of labor competition and potential exploitation.

A second aspect of the situation which enhances the importance of the labor factor in world trade and commerce arises from the tremendous disequilibrium in wealth distribution which has arisen from the war. The position of debtor and creditor countries has been reversed. Every force will therefore be brought to bear upon the debtor country to create the necessary surplus of goods to pay the creditor. This can be done only by producing goods at a less cost of production in the debtor country than similar goods in the cred-

<sup>5</sup> United States Tariff Commission. *The Japanese Cotton Industry and Trade*, Washington, 1921, pp. 8, 12, 18: "The average Japanese cotton mill pays each operative a wage amounting to about one-fifth of that being paid in the southern mills of the United States, whose products are most nearly similar to those in Japan. Owing to the necessity of employing about four times as many workers in order to operate the same number of spindles or looms and accessory machinery, the total wage cost to the average Japanese mill of operating a given amount of machinery per 10-hour day amounts to between 70 and 80 per cent of the similar cost to the American mill."

itor country. Every factor in production in the debtor country, whether labor or materials, must be made to yield the maximum. And the labor factor is standards of living. Thus we may witness labor in creditor countries apparently assisting in the breaking down of the standards of workers in the debtor countries.

Now, it is not desired to argue against low-cost production as such, but against cheap production at the expense of the labor factor. One is too prone to watch only the flow and exchange of goods which are in a sense superficial manifestations of more fundamental human conflicts. The real stakes of international competition are human standards of living.

The part that American capital may play in this battle of social standards is most important. If American capital which is being attracted out of the country can produce goods cheaper abroad than similar goods in America, to that extent production will be cut down in America. Instead of doing the producing in this country with immigrant labor, which has been excluded, production will take place at the source of supply of labor. As this newer competition with American goods takes place it takes no wild imagination to foresee the possibilities of American capital in Japan with the use of cheap labor producing cotton goods so cheaply as to drive out of business home capital in America invested in the cotton mills in this country, or at least making inevitable the same demand for lowered standards from southern mills as now emanates from the northern textile mills. It would look as if it were high time for some one to step in to defend competitors from the destructive effects of their own efforts.

### Economic Position of the Negro in West Virginia

**A**CCORDING to the report of the director of the West Virginia Bureau of Negro Welfare and Statistics, recently issued and covering the years 1925-26, the slow but steady increase noted before in the colored population of West Virginia has continued through this period. To some extent the increase is due to migration from States farther south. West Virginia differs from some other States in that the new arrivals do not flock to the cities; the percentage negroes form of the urban population tends to decrease, while in the rural population their percentage shows a small but continuous increase, the difference being due to the contrast in industrial opportunities.

The cities and towns of West Virginia offer but little in the way of employment to negroes; wages are low and rents are high; while the coal fields are constantly in need of negro labor, wages are comparatively high and rents are low. There is practically no difference in the cost of food and clothing in the rural and urban districts.

The negroes, it is stated, are slowly improving their position in the industries of the State. A number of mills and factories which formerly refused to employ colored workers have taken some, more are employed in the railroad yards and in the maintenance-of-way departments than ever before, and negro bricklayers, carpenters, plasterers, plumbers, and other workers in the building trades are

increasing in number and are finding ready employment. The bureau has made a point of securing, wherever possible, new openings in industry for negroes, and reports that they are making good.

Outside of the coal industry, our investigations show that the negro is as regular, punctual, and dependable as members of any other race and that the labor turnover is no greater among them. We arrive at this conclusion from 136 replies received from a questionnaire sent to 160 employers of from 6 to 260 negroes each (outside of the coal industry).

### Negroes and the Coal Mines

**C**OAL mining employs a larger number of negroes than any other West Virginia industry, 23,990 being engaged in it in 1925. The number fluctuates according to whether employment is good or bad, but on the whole there has been a continuous rise since 1907, when the number was 9,908. The percentage colored workers form of the total employees in coal mining has risen from 17.6 in 1907 to 21.5 in 1925. During 1925, it will be remembered, the United Mine Workers were on strike in West Virginia, and the charge was frequently made that negroes were coming in as strike breakers. In refutation of this it was pointed out that numbers of negroes were union members, striking with the others. An investigation was undertaken to discover just what rôle negroes were playing in the strike, what was their attitude toward strike breakers of their own race, toward the white union men, how they fared in the mines, and similar matters. The report of the investigation is too long for quotation, but some of the findings are given as follows:

Our conclusions, based upon this investigation, are:

1. That both negroes and whites are working and being hired under nonunion conditions.
2. That more negroes are being employed under nonunion conditions than were employed under union conditions.
3. That negro union miners on strike are as loyal to the union as their white brothers and that a lower percentage of them have returned to work under open-shop conditions than have their white brothers.
4. That both white and negro union leaders and workers admit that negro miners are more frequently discriminated against and kept out of employment by white union workers than by operators.
5. That negro strike breakers are not being imported into the strike area from the South by the operators.
6. That a large number of the negroes employed come into West Virginia from Pennsylvania, and that while some of them are experienced miners many others have had little if any previous experience in coal mining.
7. That as the Ku-Klux Klan develops strength upon coal operations negroes are gradually forced out of employment.
8. That very few negroes have been active participants in the serious disorder which has characterized this strike in several of the counties affected.
9. That the experienced negroes are as industrious, efficient, regular, and in every other respect as good workmen in and about the mines as members of any other race.
10. That labor conditions will be more stable, that there will be less friction among employees, between employees and employers, and much more satisfactory conditions from the point of view of the operators will result from the increasing of the number of negro employees upon each operation to from 25 per cent to 50 per cent of the whole number of employees. The increase should include skilled mechanics, motormen, brakemen, machine men, and foremen.

The report also points out that while the constitution of the miners' union forbids discrimination between the races in matters of employ-

ment, nevertheless such discrimination is practiced by many of the locals, and that "very frequently every native white Protestant upon the job is a klansman." In spite of this fact, however, the miners' union has been fairer in its treatment of colored workers than any other branch of the trade-union movement in the State.

### General Situation

IN West Virginia, a continuous campaign has been maintained to promote farm ownership among the negroes. The State contains much farming land which can be bought at small cost, and efforts have been made to bring the advantages of farm ownership to the attention of negroes engaged in industrial work.

That the efforts of this bureau and other agencies so engaged have brought excellent results is attested by the summaries of the 1925 farm census which show that the number of colored farm operators in West Virginia has increased from 504 in 1920 to 715 in 1925, an increase of 211, or more than 41 per cent. The percentage of increase for white farm operators for the same period was less than 3.5 per cent.

From an educational standpoint progress is reported. The number of one-room schoolhouses is decreasing and the number with two or more rooms is increasing. Boards of education are making more liberal appropriations, and the number of high schools for negro students is increasing. A strong plea is made for the establishment of a practical trade school for the colored youth.

The situation in regard to health is not satisfactory. Most of the public-health work touches the negro only indirectly, and there is need of public-health campaigns dealing immediately with his problems. Such work can be done best by negro agents, and there are only white agents to carry on the program of the State health department. In general, there is too little interest in the matter.

The State health commissioner has offered to several counties \$600 per year to aid in paying the salary of negro public-health nurses if the counties will appropriate an equal or greater amount for the same purpose. While this is a splendid offer, yet only a few counties will take advantage of it unless sentiment is created to impress county courts with the necessity for public-health work among negroes.

Meanwhile, tuberculosis continues to be responsible for more deaths among the negroes of West Virginia than any other disease, a condition which it is believed might be greatly improved by a vigorous educational campaign.

The report contains a survey of housing and of business in a number of the larger towns and cities of the State, a review of the negro fraternal and beneficial societies, a description of public institutions in which negroes are found, and discussions of the interracial relations, the work of the negro newspapers and negro professional men, with a consideration of the lines along which increased development is needed.

## Progress of the Family-Allowance Movement in Belgium<sup>1</sup>

**I**N 1925 there were 12 compensation funds in Belgium covering 225,000 workers, and in 1926-27 there were 17 funds including 250,000 workers. If the figures for the coal industry and certain other industries which pay family allowances without setting up compensation funds are included the number of workers under the system reaches 450,000, while the inclusion of the personnel of public administrations and of the National Society of Railways, which are also under the family allowance régime, brings the total to 650,000 workers. These statistics were presented to the seventh annual congress of French compensation funds by Paul Goldschmidt, an official of the Belgian Committee for the Study of Family Allowances. He pointed out that the proportion of workers under the family-allowance system in Belgium to the population of that country is comparable to the ratio in France.

Mr. Goldschmidt also called attention to the wide distribution of family-allowance funds throughout Belgium. There are already enough funds in that country to enable any firm which wishes to become a member of a fund to secure such affiliation. Employers behind the family-allowance movement are devoting their efforts to the further development of funds already established rather than to increasing their number. In one Province from 80 to 90 per cent of the working-class population is covered by the family-allowance movement.

The Belgian employers who are furthering the movement have as their objective the creation of a situation under which establishments will be compelled to take part in the movement if they wish to secure the requisite labor.

One of the difficulties that the Belgian funds have had is the great variation in the birth rate in different sections of the country. For example, in the Walloon region the average number of children charged to 100 wage earners is only 35 to 40, while in certain other districts, such as Antwerp and Flanders, there were 100 to 120 children charged to 100 wage earners and in parts of Campine 200 to 240 children. This Mr. Goldschmidt points out, results in serious technical problems for compensation funds.

The Belgian compensation funds, Mr. Goldschmidt reports, are not very much interested in sick benefits, which are being made such a feature in the auxiliary activities of the French equalization funds, but are developing auxiliary services along such lines as prenatal consultations, maternity visits, systematic consultation in regard to feeding, and the prevention of children's diseases and of infectious diseases. Invalids are sent to special clinics or cared for at home or in free hospitals and operated upon without charge.

Invalids applying at antitubercular dispensaries are placed in sanatoriums and children are given outings in fresh-air colonies, the funds cooperating with the National Work for Children, the Belgian Red Cross, the Antituberculosis League, and the Fresh Air Work.

Among the innumerable undertakings initiated by the funds two are singled out by Mr. Goldschmidt for special mention. The first is an effort to provide means for continuing the payment of family

<sup>1</sup> La Journée Industrielle, Paris, May 29-30, 1927.

allowances in case of prolonged unemployment of the father. Several solutions have already been attempted which contain great possibilities for extension. The other undertaking is the study of the problem of providing for orphans of wage earners who had been recipients of family allowances from the funds.

The Trade-union Committee of Belgium has been backing a bill for the institution of a national fund for family allowances, to which employers would contribute 60 per cent, public authorities 30 per cent, and the worker 10 per cent. The proposed monthly minimum rates to be paid out of this fund are 30 francs for a housekeeper, 30 francs for an incapacitated person, 30 francs for one child, 75 francs for 2 children, 135 francs for 3 children, 200 francs for 4 children, and 75 francs additional for each subsequent child. "Both bonuses and allowances would be independent of wages."<sup>2</sup>

According to the May 21, 1927, issue of the official organ of the Trade-Union Committee of Belgium, *Le Mouvement Syndical Belge*, the employers are opposing the proposal for such a fund.

The Belgian Federation of Christian Trade-Unions at a meeting on January 25, 1927, to consider the general position of the workers and the measures to be taken or recommended in the event of an economic crisis, urged among other reforms to improve the lot of the workers, to guarantee their future, and to contribute to the establishment of industrial and social peace, the passing of an act making family allowances general.<sup>3</sup>

### Seventh Annual Congress of French Family-Allowance Funds

**A**T THE 1927 Congress of the French Family Allowance Funds, which was held at Brussels May 23-25, the number of such funds in France was reported as 210, with a membership of more than 16,200 employers, covering 1,420,000 employees, and distributing 230,000,000 francs in allowances per annum. As compared with the figures reported at the preceding annual congress there was an increase of 15 funds, 2,200 employers, 120,000 employees, and 30,000,000 francs in allowances. If the allowances paid outside of the family allowance funds are included in the total reported at the 1927 meeting, the amount distributed reaches 1,318,000,000 francs, covering 3,700,000 employees.<sup>4</sup> Among the family-allowance funds there are 13 commercial funds and 32 funds for agricultural workers.

The director of the French Central Committee on Family Allowances also reported that there is a trend among employers to pay more substantial allowances. The average family-allowance scale of the industrial funds is as follows: For 1 child, 27 francs per month; for 2 children, 67 francs; for 3 children, 115 francs; for 4 children, 181 francs; for 5 children, 250 francs; for 6 children, 321 francs. The rates of funds in large centers are considerably higher, the maximum being: For 1 child, 60 francs per month; for 2 children, 150 francs; for 3 children, 240 francs; for 6 children, 540 francs.

<sup>2</sup> The International Trade Union Movement, Amsterdam, March, 1927, p. 39.

<sup>3</sup> International Labor Office; Industrial and Labor Information, Geneva, Mar. 14, 1927, pp. 429, 430.

<sup>4</sup> La Journée Industrielle, Paris, June 5-7, 1927, p. 7.

A recent inquiry made in the group of metallurgical and allied industries in the Paris region showed that the allowance for one child constitutes approximately 4 per cent of the wages of a manual worker, that for 2 children 10 per cent, and that for 5 children as high as 40 per cent.

Attention was also called by the director to the increasing of sickness allowances and the assumption of other social risks by industrialists in the family-allowance movement in France.

Among other subjects discussed at the congress were the organization of mutual aid societies on a family basis and the question of granting family allowances to home workers.<sup>1</sup>

One of the resolutions adopted at the meeting favored the adherence of all employers to family-allowance funds in order to include all classes of workers under the family-allowance system; and also that such funds continue to perfect their social services for the progressive improvement of workers' families.

### New South Wales Child Endowment Act<sup>2</sup>

**I**N THE latter part of March, 1927, a child endowment act was passed in New South Wales,<sup>3</sup> which becomes operative upon the industrial commissioner's declaration of a basic wage according to the requirements of a man and wife without children. The law provides that such wage be supplemented by an allowance of 5 shillings per week for each child under 14 years of age. The present basic wage is £4 4s.<sup>4</sup>

In the law passed the income under which children's allowances are to be granted was very much reduced from the income fixed in the original governmental proposals. The limit now being set is that of the total living wage which is to be declared not later than September 30, 1927, plus £13 per year for each child under 14 years of age. Only sufficient endowment will be granted to raise the family income up to such aggregate. Such allowances are to be paid to the mother.

A copy of the act as passed is not available, but, according to recent Australian publications, the fund was to be contributed to by the State and by private employers.<sup>5</sup>

The New South Wales Labor Government expects that the basic wage which is to be declared by the industrial commissioner will be slightly higher than the present basic wage, which, as already stated, is £4 4s.

The Government bill provided for allowances for 550,000 children, but through an amendment of the Legislative Council 154,000 children of employees under Federal awards were excluded. Premier Lang reports that, when Parliament reopens, one of the first matters to be taken up will be State endowment for the 154,000 children who

<sup>1</sup> La Journée Industrielle, Paris, May 25, 1927, p. 1.

<sup>2</sup> Unless otherwise specified, the source for this article is the Queensland Industrial Gazette, Brisbane, Apr. 25, 1927, p. 267.

<sup>3</sup> For controversy over bill, see Labor Review, June, 1927, pp. 127, 128.

<sup>4</sup> At par, pound-\$4.8665, shilling=24.3 cents; exchange rate about par.

<sup>5</sup> Labor Review, June, 1927, p. 128; and Australian Worker, Sydney, Mar. 30, 1927, p. 15.

were excluded from the provisions of the existing family endowment law.

In March, 1927, a move was being made by a committee created by the New South Wales Trades Union Congress to persuade all unions to demand a basic wage of £5 16s. a week.

According to the Australian Worker of May 4, 1927, the majority of wage-earning families will get no endowment because their incomes are higher than that set for coming under the child endowment act.

The Prime Minister of Australia called a conference of Commonwealth and State representatives to meet early in June, 1927, to formulate a national child-endowment policy, as this was a matter which could not be dealt with by the individual States without disturbing the foundations of interstate trade.<sup>6</sup>

<sup>6</sup> International Labor Office. Industrial and Labor Information, Geneva, May 9, 1927, p. 229.

## PRODUCTIVITY OF LABOR AND INDUSTRY

### Increasing Productivity of Labor in the Automobile Industry

THAT greatly increased output can be secured with a comparatively small increase in the number of workers through careful planning, or "production control" as it is termed, is shown in an article in the Magazine of Business for July, 1927, entitled "We make 1,400 per cent more cars with 10 per cent more men," by Cady B. Durham, vice president of a large automobile company. This company is now turning out 1,200 cars daily as against 80 cars in 1912, an increase of 1,400 per cent. It has on its pay roll 26,000 employees, 7,400 of which are employed in the engine plant, the foundry, and the brass foundry, on work which formerly was bought outside. Allowing for this there was an increase of about 10 per cent over the number on the factory pay roll in 1912, which was then between 13,000 and 17,000 men. This showing has been made possible by moving the material faster, using conveyors and automatic machinery, and scheduling it so exactly that storage is practically eliminated. Careful planning, it is contended, can be employed in any business and will bring results similar to those shown, as the same general sort of manufacturing and conveying methods, the continuous process, progressive assembly, work brought to the workman and carried away mechanically, are being used successfully, for example, in a sanitary pottery, a metal-working plant, and an electrical plant.

"Production control in its broad sense," it is said, "is the operation of sensible budgeting as manifested on the production side." It coordinates and synchronizes purchasing, deliveries and transportation, materials storage, handling, processes, parts stock, and storage. As one result of such control in this plant, whereas it used to take 18 days from the time a wheel entered the wheel paint shop until it was ready for use, now within 4 hours of its entry into the paint shop the wheel is on the automobile.

Five years ago an operator at a machine in this plant took his material from a "tote-box" at one side, performed his operation, and placed it in another box on his other side. When this second box was filled it was moved to the next machine for the operation by the next operator. To-day, the machines are placed just far enough apart so that the operators can move freely, and when the first operator finishes his operation, he pushes or slides the piece along to the second operator, who, after doing his job, pushes it along to the third operator. This results in a great saving of space, and eliminates the accumulation of stock between machines.

The following general statements are given by the author as covering what production control is and how it works:

1. Production control and its fellow, progressive assembly, are an approach to continuous-process manufacturing in lines where continuous processes are not possible. The less money tied up in in-process and finished inventories and in equipment, the more money a business should make.
2. Production control simply fits together into a pattern the small operations which most manufacturers see as practically unrelated. It starts with the sales schedule and synchronizes every operation from buying material to shipping finished product.
3. Production control is broad. It includes such policies as, "Shall we buy this part or make it?" and "Shall we increase our equipment investment to cut an operation cost?"
4. Production control is interrelated with production economies; putting work through faster from receiving dock to shipping platform decreases space requirements for making and storing, and eliminates many handling costs.
5. By increasing per capita production of consumable goods throughout this country, production control has given tremendous impetus to our national prosperity.

### **Labor Requirements for Principal Crops<sup>1</sup>**

FARM crops may be divided into three broad groups with reference to the amount of man labor used in producing them. Tobacco, cotton, sugar beets, potatoes, fruit, and truck crops absorb relatively large quantities of labor. Corn, the grain sorghums, peanuts, and like crops need less labor than the more intensely cultivated crops, but more than most hay and small-grain crops which are usually produced with the least labor. This classification with respect to labor used is only relative. More labor may be used on a particular crop in some sections than is usually needed to produce some other crop of a more intensive nature in another part of the country.

Ordinarily, tobacco requires more labor per acre than any other major crop. Requirements for producing different types of tobacco differ, largely because of the different methods of harvesting, curing, and preparing the leaf for market. An acre of burley tobacco yielding from 800 to 1,000 pounds requires for growing, preparing for market, and marketing from 350 to 400 hours of labor. An acre of bright tobacco, the principal cigarette type, as grown in south-central Virginia and yielding 600 to 700 pounds requires about 400 to 500 hours of labor. In the same district 300 to 350 hours of labor will produce an acre of Virginia dark fire-cured tobacco yielding 800 to 900 pounds, and 250 to 275 hours of labor will produce an acre of Kentucky dark tobacco of the same yield. Labor required for producing a pound of tobacco of these types ranges from about 0.7 hour for Virginia bright to about 0.3 hour for Kentucky dark tobacco.

#### **Cotton's Labor Requirements**

IN THE eastern cotton States (the old Cotton Belt), on farms where the yield of lint is 150 to 200 pounds per acre, 100 to 125 hours of labor are usually necessary to prepare, cultivate, harvest, and market an acre of cotton. In the black belt of Texas, 50 to 60 hours

<sup>1</sup> Reprinted from U. S. Department of Agriculture, Yearbook of Agriculture, 1926; "Labor requirements measured for principal crops," by A. P. Brodell, Washington, 1927, pp. 466, 467.

of labor are utilized in producing an acre of cotton yielding 140 to 160 pounds of lint, while in the western district of the same State, growers with similar yields normally expend only 35 to 40 hours of labor per acre. Requirements for producing a pound of lint cotton for the above districts range from about 0.7 hour of man labor in the Eastern States to about 0.2 hour in the western district of Texas.

Large level fields which permit the use of larger machinery for preparing the land and for cultivating the crop, together with seasonal conditions which make control of weeds easier, are the chief reasons why western cotton growers produce cotton with less labor than do the growers in other districts.

The use of large machines also makes it possible to grow more cotton per man. In parts of Texas and Oklahoma growers frequently plant as much as 100 acres of cotton per man with extra labor for hoeing, thinning, and harvesting. Growers in the eastern cotton States usually plant from 10 to 20 acres per man.

From 65 to 100 hours of labor are normally used in producing an acre of potatoes. Average requirements for producing a bushel of late potatoes are about 0.4 hour in the Northern States, while 0.6 to 0.7 hour of labor is usually needed in producing a bushel of early potatoes in southern districts. In the New England States more labor is used on an acre of potatoes than in other late-potato districts, but the higher yields make it possible to produce a bushel of potatoes with about the same quantity of labor as is used in some of the other late-potato districts.

#### Much Variation on Corn

IN THE production of corn, requirements in various districts differ largely because of different methods of harvesting, size of machines used, and yield per acre. In the Corn Belt where good-sized implements are used for preparing the land and cultivating the crop, and where the crop is harvested by hand from the standing stalk, from 15 to 20 hours of labor per acre are usually adequate with yields of 35 to 45 bushels. In some of the Southern States from 50 to 70 hours of labor per acre are ordinarily required for corn yielding 20 to 30 bushels when the stalks are cut and shocked and the ears are harvested by hand from the shock. In the North Atlantic States corn is usually harvested in this way and the requirements per acre are similar, though yields are higher.

Requirements for producing a bushel of corn in the various districts differ even more than do requirements per acre. Usually about 2.5 hours of labor are required for producing a bushel of corn and caring for the stover in certain Southern States as compared with about 0.5 hour in the Corn Belt when the ears are husked from the standing stalk and large level fields and large machines make it possible for one man to grow more acres of corn than in other producing districts.

Small-grain crops require relatively little labor. Size of machines used, size of fields, lay of land, and climatic conditions affect labor requirements for producing these crops to a greater extent than does yield. Requirements for producing a bushel of wheat range from about 2.5 hours in the Southern States to about 0.3 hour in the

Pacific Northwest. In the Western States combines are frequently used for harvesting and large teams or tractors are utilized for preparing land and for seeding, whereas in the southern and eastern districts relatively small machines and crews are used for all operations.

But little labor is usually required for producing an acre of most hay crops and practically all of this labor is required during the harvesting season. Requirements on a ton basis vary from 4.5 hours for clover hay to 7.2 hours for alfalfa on irrigated land. For annuals, such as cowpeas or soy beans, which are seeded for hay and cultivated during the growing season, requirements are much higher than for other hay crops.

## WOMEN IN INDUSTRY

### Women in Industry in Delaware and Tennessee

THE Women's Bureau of the Department of Labor has recently issued two studies of women in industry, one dealing with conditions in Delaware and the other with conditions in Tennessee, which were made at very nearly the same date and present some interesting similarities and contrasts.

#### Women in Delaware Industries

THE study in this State was made in response to a request from the labor commission of Delaware, which wished information as to the hours, wages, and working conditions of women industrially employed within the State, including those working in canneries. This request was indorsed by the Delaware Council of Social Agencies, an association made up of 30 organizations. The study was undertaken and the field work was carried out during the late summer and early fall of 1924. The results have recently been published as part of the series on women in State industries which the bureau began some seven years ago.

The survey covered 146 establishments in 29 cities and towns, employing 4,176 women. More than half (56.2 per cent) were in manufacturing industries; 10.8 per cent were in mercantile establishments, 4.7 per cent in laundries, 2 per cent in hotels and restaurants, and 26.2 per cent in vegetable canneries. The age distribution of those reporting on this item was as follows:

	Number	Per cent
16 and under 20 years.....	1,063	28.9
20 and under 25 years.....	732	19.9
25 and under 30 years.....	403	11.0
30 and under 40 years.....	652	17.8
40 and under 50 years.....	432	11.8
50 and under 60 years.....	236	6.4
60 years and over.....	154	4.2
Total.....	3,672	100.0

It will be noticed that 51.2 per cent are aged 25 or over, and that two-fifths (40.2 per cent) are 30 or over. Attention is called to this fact as showing that women in industry are no longer—if they ever were—predominantly young girls who go to work as a temporary matter, expecting to give up employment within a few years. The conjugal situation of those studied points to the same conclusion. Of the 3,255 from whom reports on this matter were received, 53.7 per cent were single, 33.6 per cent were married, and 12.6 per cent were widowed, separated, or divorced. In other words, for very nearly

half of the whole group marriage had not meant permanent withdrawal from the wage-earning world; a fact which is especially significant when it is considered that these were in the main native-born Americans, only 9.2 per cent being foreign born.

The median week's earnings for those employed in 97 factories, stores and laundries were \$11.05; taking only the full-time workers, they were \$12.90. The range was from \$8.10 in clothing factories to \$16.40 in the manufacture of cigars. Taking the time workers only, of whom there were 1,385 whose rates of wages and earnings were both recorded, it was found that while the median wage was \$11.60 a week, the median earnings for the week were only \$10.55. In some of the industries the discrepancy was much greater.

The highest rate of any industry in the table appears for the women manufacturing food products (\$18.15), yet median earnings of this group fall 30.3 per cent below this amount. Leather manufacture is second (\$16.10), and its median earnings are 5.9 per cent less. Paper and paper products, showing a median rate of \$13.95, is third, but this is the group in which median earnings are higher by 5.4 per cent—an increase due to the bonus paid by one firm in the industry. The lowest median rates are for women in the manufacture of wood products and of cigars, in 5-and-10-cent stores, and in laundries, all of which fall below \$10; in other words, one-half the women for whom weekly rates were reported in these four industries would receive not more than \$9.50, \$9.75, \$9.75 or \$9.70, respectively, even though they had worked the full scheduled hours of the firm in which they were employed.

A study of the connection between time spent in the trade and earnings showed that median earnings increased, rather irregularly, with length of experience, until "the median earnings of women who had spent as much as 15 years in the trade were between \$6 and \$7 higher than the amount paid beginners."

In hotel and restaurant service the median week's earnings for 64 white women was \$10.15 and for 21 negro women \$10.75. In vegetable canneries the median week's earnings for 844 white women was \$9.40 and for 252 colored women, \$5.55.

Under the Delaware laws, a 10-hour day and a 55-hour week for women is permitted in factories, stores, and laundries, but in practice better conditions than these were frequent.

As many as nine-tenths of the women reported in the factories, stores and laundries had a daily schedule of less than 10 hours, and more than one-fifth of the total number were employed in plants in which the weekly schedule was 48 hours or less. Of the 18 States for which hour data have been obtained by agents of the Women's Bureau, Delaware falls below 10 in the proportion of women for whom scheduled weekly hours were 48 or less.

In restaurants and hotels, hours were found to be objectionable because of irregularity rather than of length, the daily and weekly schedule of the majority of the women being not unduly long. "Some women were required to put in a seven-day week or were subjected to the inconvenience of broken shifts with a long over-all span." In the canneries, the usual hour restrictions did not apply, and 31.5 per cent of the women for whom hours worked were reported had a week longer than 55 hours.

General workroom conditions left much to be desired. Here, as elsewhere, it was found that some plants maintained a high standard, showing that there is nothing in the nature of the industries studied which makes good conditions impossible, but more fell below what is desirable in some or many particulars. Cleaning, heating, lighting,

and ventilation were found to be unsatisfactory in a number of cases. Provision for seating was often poor or entirely lacking.

In 32 manufacturing establishments and 5 laundries, some of or all the women stood constantly while working, and in only about one-third of these firms were there chairs or stools available for occasional use. When there was a lull in the operations or while waiting for fresh supplies it was a common sight to see girls and women resting on window sills or worktables or leaning against the walls.

In 46 factories visited some of the women sat at their operations. For these, the ordinary stiff-backed kitchen chair was the common provision, but in 16 plants some of the women sat all day on stools or benches without backs. "Satisfactory seating for sitting jobs was found in only two plants, where chairs with adjustable legs and backs had been installed." In discussing these conditions, the report emphasizes the fact that many jobs could be carried on with less expense to the employer and greater conservation of strength for the worker if suitable seating accommodations were provided.

### Women in Tennessee Industries

THE field work of the Tennessee investigation, which, like that in Delaware, was requested by the State agencies, was begun in the latter part of February, 1925, and completed in May of the same year. It covered 216 factories, stores, and laundries in 27 cities and towns, in which 16,596 women and 106 girls under 16 were employed. Of the latter, 83 were in textile and 19 in cigar factories.

The great majority of the women, 83.9 per cent, were in some form of manufacturing industry, textiles employing 51.7 per cent of the total group. One-tenth were in mercantile establishments and 5.9 per cent in laundries. Colored women, who formed 8.6 per cent of those studied, were employed mainly in laundries (45.6 per cent), in the manufacture of wood products (15.3 per cent), and in the manufacture of tobacco products other than cigars (13.9 per cent).

The age distribution, excluding girls under 16, was as follows:

	Number	Per cent
16 and under 20 years-----	2,863	28.9
20 and under 25 years-----	2,494	25.2
25 and under 30 years-----	1,343	13.6
30 and under 40 years-----	1,693	17.1
40 and under 50 years-----	899	9.1
50 and under 60 years-----	471	4.8
60 years and over-----	121	1.2
Total-----	9,884	100.0

It will be noticed that the age level here is somewhat lower than among the women studied in Delaware. The proportion under 20 is precisely the same, 28.9 per cent, in the two States, but while in Delaware slightly over one-half were 25 or over, in Tennessee 45.8 per cent were in this age group, while in the latter State those aged 30 and over formed 32.2 per cent as against 40.2 per cent in Delaware.

On the other hand, while in Delaware 53.7 per cent of those reporting as to conjugal condition were single, in Tennessee 50.6 per cent were or had been married. When, however, only white women are considered, the figures are very similar, 52.4 per cent of those in Tennessee being single.

## Wages and Earnings

Records of actual earnings for a given week were obtained for 14,642 white women. The median earnings were \$11.10, the range being from \$8.30 in the manufacture of furniture to \$16.10 in the printing and publishing trade. In the general mercantile establishments, the median earnings were \$14.15; in 5-and-10-cent stores they were \$9.20, and in laundries, \$8.95. For colored women the level was much lower, their median for all industries being \$6.95, and for full-time workers, \$7.40, as against the \$12.45 median of full-time white workers.

Weekly wage rates and actual weekly earnings were secured for 4,640 white women, time workers, the results being as follows:

WEEKLY WAGE RATES AND ACTUAL WEEKLY EARNINGS OF WHITE WOMEN, TIME WORKERS, IN TENNESSEE, 1925

Amount	Number of women for whom amount specified was—		Per cent of women for whom amount specified was—	
	Weekly rate	Week's earnings	Weekly rate	Week's earnings
Under \$5.....	5	248	0.1	5.3
\$5 and under \$10.....	1,532	1,597	33.0	34.4
\$10 and under \$15.....	2,033	1,754	43.8	37.8
\$15 and under \$20.....	813	749	17.5	16.1
\$20 and under \$25.....	150	165	3.2	3.6
\$25 and over.....	107	127	2.3	2.7
Total.....	4,640	4,640	100.0	100.0

While the difference in distribution is not marked, it is interesting. It was to be expected that there would be more women who earned less than \$5 than of those who had rates below that amount. It is rather startling that any women should have so low a rate. The \$5 to \$10 groups also claimed more earnings than rates, but the two midgroups accounted for a larger proportion of the rates than of the earnings. When the two higher dollar groups are reached the proportion of women with such earnings exceeds the proportion with rates of those amounts, although to no considerable extent. In other words the distribution of the two sets of figures shows the effects both of lost time and of overtime, although the extent of the latter was slight.

## Hours of Work

The Tennessee law permits a working-day of 10½ hours, and a week of 57 hours. The scheduled daily hours ranged from under 8 to the full 10½, the proportion of women working under each schedule being as follows:

	Per cent		Per cent
Under 8 hours.....	1.9	Over 9 and under 10 hours.....	30.4
8 hours.....	4.0	10 hours.....	34.8
Over 8 and under 9.....	10.8	Over 10 and under 10½.....	9.6
9 hours.....	7.3	10½ hours.....	1.1

It will be seen that over four-fifths (83.2 per cent) have a day of 9 hours or more, and that not far from half (45.5 per cent) have a scheduled day of 10 hours or more. Weekly hours were affected by the fact that so many of the women worked in textile factories, in which a short Saturday is common. Practically half, 49.6 per cent, had a weekly schedule of 55 hours or more, and 9.7 per cent had a

weekly schedule of 48 hours or less. Fewer than the scheduled hours were worked by 44 per cent of those for whom time was reported, while 5.6 per cent worked for more than the scheduled hours. For 60.8 per cent of the women in stores the Saturday hours were longer than the daily schedule.

#### Working Conditions

Inadequate or unsatisfactory lighting was found to be a common condition, the natural light being found either inadequate or undesirable because of the glare it caused in 98 establishments, while artificial light caused glare for some or all of the women employed in 116 establishments. Other undesirable conditions were narrow or obstructed aisles, and brick or concrete floors, with no wooden platforms provided for those who had to stand at their work. Unsatisfactory seating arrangements were common.

In 58 factories and laundries no seats were provided for women who stood at their work; in 32 factories and laundries none of the women who sat all day at their work had seats with backs.

## INDUSTRIAL ACCIDENTS

### Accident Rates for the Iron and Steel Industry in Specified State Jurisdictions, 1922 to 1925

THE table herewith presented has been prepared in response to repeated suggestions that a classification of accidents in the iron and steel industry by States would have interest and value.

Certain cautions should be observed in drawing conclusions from these figures:

1. The table should not be regarded as showing a complete presentation of the situation in the several States. It covers only those cases for which the reports were in a form to be assembled without undue expenditure of time and effort.

2. Certain of the States in which the exposure was less than the equivalent of 1,000 full-year workers have been omitted; and as is evident, in some of the included States the exposure is not of sufficient volume to afford a fully typical set of rates.

3. The iron and steel industry is not uniform from State to State. In some States there is a larger volume of one form of activity than in others. The only way to avoid this condition would have been to analyze the reports for each State by departments, but if this had been done the difficulty of too-small exposure would have been intensified.

Giving due attention to these cautions the following conclusions may be advanced:

1. As would have been anticipated from the presentation by departments, the general trend of the rates over this 4-year period is downward. There are very considerable irregularities for which the analysis here possibly does not afford a complete explanation.

2. It is evident that those States in which there has been the most extensive and the most prolonged accident-prevention effort have as a rule lower accident rates.

3. In spite of the very striking improvement which has occurred in the industry, it is evident that there is still chance, a large chance, for improvement.

**ACCIDENT RATES IN IRON AND STEEL INDUSTRY, BY STATES, 1922 TO 1925**

State and year	300-day workers	Number of cases				Accident frequency rates: (Per 1,000,000 hours' exposure)				Accident severity rates: (Per 1,000 hours' exposure)			
		Death	Per manent disability	Tempo- rary disability	Total	Death	Per manent disability	Tempo- rary disability	Total	Death	Per manent disability	Tempo- rary disability	Total
Alabama:													
1922	10,998	10	51	1,163	1,224	0.30	1.55	35.25	37.10	1.82	1.17	0.48	3.47
1923	11,915	7	78	1,348	1,433	.20	2.18	37.74	40.09	1.18	1.77	.87	3.82
1924	13,705	16	41	1,127	1,184	.39	1.00	27.41	28.80	2.33	1.06	.62	4.01
1925	15,244	14	2	552	568	.31	.04	12.07	12.42	1.84	1.37	.19	3.40
California:													
1922	4,013	3	35	711	749	.25	2.91	59.05	62.21	1.50	2.63	.80	4.93
1923	3,113	3	11	597	611	.32	1.18	63.92	65.42	1.93	1.19	.75	3.87
1924	2,901	2	16	522	540	.23	1.84	59.97	62.04	1.38	1.43	1.34	4.15
1925	3,018	1	1	278	280	.11	.11	30.70	30.92	.66	1.56	.71	2.93
Colorado:													
1922	3,351	3	2	367	372	.30	.20	36.51	37.01	1.79	.27	.36	2.42
1923	4,164	7	13	462	482	.56	1.04	36.98	38.58	3.36	1.22	.76	5.34
1924	4,269	6	22	452	480	.47	1.72	35.29	37.48	2.81	1.52	.63	4.96
1925	4,243	3	14	592	609	.24	1.10	46.50	47.84	1.41	.93	.78	3.12
Connecticut:													
1922	3,778	3	22	510	535	.26	1.94	44.99	47.19	1.59	1.38	.67	3.64
1923	5,307	5	34	446	485	.31	2.14	28.01	30.46	1.88	1.58	.27	3.73
1924	5,639	6	40	522	568	.35	2.36	30.85	33.56	2.13	1.31	.43	3.87
1925	7,263	5	1	826	832	.06	37.91	38.10	1.38	.28	.35	2.01	
Illinois:													
1922	23,926	16	95	2,370	2,481	.22	1.32	33.02	34.56	1.34	1.00	.44	2.78
1923	40,097	39	171	3,753	3,963	.32	1.42	31.20	32.94	1.95	1.63	.55	4.13
1924	38,147	21	126	2,934	3,081	.19	1.13	26.26	27.58	1.13	.98	.21	2.32
1925	35,810	20	120	2,551	2,691	.19	1.12	23.75	25.06	1.12	1.32	.36	2.80
Indiana:													
1922	36,683	18	113	2,200	2,331	.16	1.03	20.05	21.24	.98	.95	.27	2.20
1923	22,887	12	67	1,746	1,825	.17	.98	25.43	26.58	1.05	.86	.33	2.34
1924	34,846	30	69	1,591	1,690	.29	.66	15.22	16.17	1.72	.75	.28	2.75
1925	32,743	25	86	2,110	2,221	.25	.88	21.48	22.61	1.53	.73	.31	2.57
Kentucky:													
1922	1,396	2	10	477	489	.48	2.39	113.89	116.76	2.87	1.43	1.82	6.12
1923	2,601	5	18	899	922	.64	2.31	115.22	118.17	3.84	4.31	.87	9.02
1924	1,734	1	9	144	154	.19	1.73	27.68	29.60	1.15	1.58	.39	3.12
1925	2,550	13	15	193	221	1.70	1.96	25.23	28.89	10.20	1.83	.39	12.42
Massachusetts:													
1922	5,610	7	29	337	373	.41	1.71	19.90	22.02	2.48	1.64	.53	4.65
1923	5,018	4	26	230	260	.27	1.73	15.28	17.28	1.59	1.08	.57	3.24
1924	7,580	3	22	246	271	.13	.97	10.82	11.92	.79	1.55	.29	2.63
1925	6,645	1	7	126	134	.05	.35	6.32	6.72	.30	.33	.21	.84
Michigan:													
1922	3,928	6	16	916	938	.51	1.36	77.73	79.60	3.05	1.29	.86	5.20
1923	4,399	11	19	984	1,014	.83	1.44	74.57	76.84	5.00	1.05	.93	6.98
1924	2,457	4	14	583	601	.54	1.90	79.08	81.52	3.26	3.36	.90	7.72
1925	4,869	4	8	1,093	1,105	.27	.56	74.83	75.66	1.64	.70	.92	3.26
Missouri:													
1922	4,676	6	12	1,632	1,650	.43	.86	116.35	117.64	2.57	1.01	1.41	4.99
1923	4,255	4	9	903	907	.31	70.74	71.05	—	.33	.84	1.17	
1924	1,284	1	8	266	275	.26	2.08	69.06	71.40	1.56	1.78	.57	2.74
1925	3,662	1	2	294	297	.09	.18	26.76	27.08	.55	.19	.34	1.08
New Jersey:													
1922	6,597	1	37	625	663	.05	1.87	31.58	33.50	.30	1.20	.55	2.05
1923	7,341	47	780	827	—	—	2.13	35.42	37.55	—	2.17	.57	2.74
1924	7,175	47	772	819	—	—	2.18	35.87	38.05	—	2.69	.70	3.39
1925	6,923	4	31	769	804	.19	1.49	37.03	37.71	1.16	1.46	.59	3.21
New York:													
1922	9,785	11	47	1,625	1,683	.43	1.85	64.13	66.42	2.60	1.82	.99	5.41
1923	11,377	9	65	2,141	2,215	.26	1.90	62.73	64.89	1.58	1.84	.73	4.15
1924	6,903	5	51	1,107	1,163	.24	2.46	53.46	56.16	1.45	2.03	.94	4.42
1925	10,372	7	66	2,725	2,799	.22	2.12	87.58	89.92	1.35	2.35	.89	4.59
Ohio:													
1922	51,424	42	125	5,268	5,435	.27	.81	34.15	35.23	1.63	.66	.48	2.77
1923	77,979	39	201	5,763	6,003	.17	.86	24.63	25.66	1.00	.87	.39	2.26
1924	75,282	57	181	5,223	5,461	.25	.80	23.13	24.18	1.54	.98	.36	2.88
1925	86,820	33	150	5,059	5,242	.13	.58	19.42	20.13	.76	.53	.25	1.54
Pennsylvania:													
1922	102,186	60	103	8,364	8,527	.20	.34	27.28	27.82	1.17	.34	.45	1.96
1923	140,259	112	244	12,188	12,544	.27	.58	28.97	29.82	1.60	.59	1.03	3.22
1924	154,800	54	244	8,382	8,680	.12	.53	18.05	18.70	.70	.34	.30	1.34
1925	149,069	75	218	9,527	9,820	.18	.49	21.30	21.97	1.01	.45	.26	1.72

## ACCIDENT RATES IN IRON AND STEEL INDUSTRY, BY STATES, 1922 TO 1925—Continued

State and year	300-day workers	Number of cases			Accident frequency rates: (Per 1,000,000 hours' exposure)			Accident severity rates: (Per 1,000 hours' exposure)						
		Death	Perman- ent dis- ability	Tem- porary dis- ability	Total	Death	Perman- ent dis- ability	Tem- porary dis- ability	Total	Death	Perman- ent dis- ability	Tem- porary dis- ability	Total	
Tennessee:														
1922	1,543		4	220	228		.86	47.52	48.38		1.49	.69	2.18	
1923	2,258		9	19	437	465	1.33	2.80	64.50	68.63	7.97	2.28	1.03	11.23
1924	1,503		3	6	77	86	.67	1.33	17.08	19.07	3.99	1.60	.25	5.84
1925	1,256		1	2	196	1.99	.27	.53	52.02	52.82	1.59	1.07	.69	3.95
Washington:														
1922	534		6	80	86		3.75	49.95	53.70		5.99	.50	6.58	
1923	800		1	77	78		.42	32.09	32.51		.13	.50	.63	
1924	603		2	66	68		1.11	36.50	37.61		1.49	.88	2.37	
1925	1,209		2	3	181	186	.55	.83	49.89	51.27	3.31	1.27	1.15	5.73
West Virginia:														
1922	2,702		2	6	592	600	.24	.74	73.03	74.01	1.48	.84	.85	3.17
1923	9,336		8	13	749	770	.29	.46	26.74	27.49	1.71	.54	.33	2.58
1924	4,613		7	18	806	831	.51	1.30	58.24	60.05	3.03	1.53	1.70	6.26
1925	7,964		13	14	537	564	.54	.59	22.48	23.61	3.26	.67	.28	4.21
Wisconsin:														
1922	5,441		20	790	810		1.23	48.40	49.63		1.39	.73	2.12	
1923	4,264		3	17	708	728	.23	1.33	55.34	56.90	1.41	1.23	.78	3.42
1924	8,321		5	47	1,275	1,327	.20	1.88	51.08	53.16	1.20	1.57	.68	3.45
1925	6,089		2	34	1,121	1,157	.13	2.18	72.02	74.33	.77	2.11	.81	3.69

## Accident Experience of American Railways, 1923 and 1926

OME interesting accident facts are brought out in Circular No. 156, issued by the safety section of the American Railway Association,<sup>1</sup> in outlining its program of safety activities for the month of July, 1927. A comparison of the accident records for the years 1923 and 1926 is presented to show how nearly the railroads of the country approached the 35 per cent reduction, based on the year 1923, in the number of accidents set as the goal to be reached by 1930. It appears that 43 of the railroads have already attained a reduction of 35 per cent or more in accidents, 60 railroads have reduced accidents from 15 to 35 per cent, 41 railroads have made slight reductions, and 43 railroads have suffered increases in accidents.

Summing up the facts given in this circular, from 1923 to 1926, casualties (killed and injured) to passengers were reduced from 6,606 to 5,304, or a reduction of 13.9 per cent in the rate per million passenger miles; casualties to employees were reduced from 153,900 to 112,828, or a reduction of 22.1 per cent in the rate per million man-hours; and casualties to persons at highway crossings were increased from 8,582 to 9,483, or 10.5 per cent. Taking as a measure of the accidents to persons at highway crossings the number of automobile registrations, which the report gives as 15,092,177 for 1923 and 22,046,957 for 1926, the accident rate figures out at 150.3 killed and 418.4 injured per million automobiles in 1923, and 113 killed and 317.1 injured per million cars in 1926, or a total accident rate of 568.6 in 1923 and of 430.1 in 1926. Hence accidents at highway crossings really show a decrease in 1926 as compared to 1923.

<sup>1</sup> American Railway Association, safety section, Circular No. 156. Safety program. Schedule of activities for month of July, 1927. Inventory for year 1926 vs. 1923. New York, 1927. 3 pp.

The following table gives the experience for the two years, 1923 and 1926, not including accidents to nontrespassers:

NUMBER OF CASUALTIES (KILLED AND INJURED) CAUSED BY EACH SPECIFIED KIND OF ACCIDENT ON RAILROADS AND ACCIDENT RATES THEREFOR, 1923 AND 1926

Kind of accident	Casualties			Accident rates <sup>1</sup>		
	1923	1926	Per cent of decrease	1923	1926	Per cent of decrease
Passengers:						
Train	2,704	1,908	29.4	0.70	0.53	24.3
Train service	3,281	2,705	17.5	.85	.76	10.6
Nontrain	621	691	11.2	.16	.19	19.0
Total	6,606	5,304	19.7	1.73	1.49	13.9
Employees:						
Train	2,214	1,779	19.6	.46	.39	15.2
Train service	38,825	33,439	13.9	7.90	7.34	8.1
Nontrain	112,861	77,610	31.2	23.23	17.03	26.7
Total	153,900	112,828	26.7	31.68	24.76	21.8

<sup>1</sup> Per million passenger miles in case of passenger accidents and per million man-hours in case of accidents to employees.

<sup>2</sup> Increase.

### Incidental Cost of Accidents to the Employer<sup>1</sup>

By HERBERT W. HEINRICH, TRAVELERS INSURANCE CO., HARTFORD, CONN.

EVERYBODY knows that accidents represent monetary loss as well as human suffering. I am going to consider some of these monetary losses, and I propose to call your attention to the fact that the heaviest of them are usually overlooked. Prominent in the mind of every employer is the first or direct cost of the accident, as measured by compensation or liability claims, plus the charges for medical attention. This cost can be covered by insurance, and is paid by the insurance company.

In addition to this direct and obvious cost, however, there are numerous other sources of expense involved which are not covered by the insurance policy, but which must, in the nature of things, be borne by the employer. I shall use the word "incidental" to distinguish these secondary or noninsurable losses from the immediate, evident, insurable ones, upon which the attention of the employer is almost invariably fixed.

Employers are becoming more and more receptive to the idea that accident prevention has a tremendous moral and humane significance, yet they are likely to remain more or less inactive unless they are presented with an incentive in addition to that which is based upon humanitarian principles. This incentive is the indirect cost of accidents to the employer—that part of the cost that I have called "incidental." So far as I know there has been no previous attempt to fix, definitely, the amount of this cost. No gauge has yet been given whereby the employer can measure, under existing methods of

<sup>1</sup> Extracts from an address delivered at the Atlantic Coast Safety Conference, held at Philadelphia, Pa., June 24, 1927.

cost accounting and by means of factors already known to him, the cost of accidents in his own industry. Except in rare cases, moreover, it is unfortunately true that accident data are not gathered nor tabulated in ways that permit accurate estimation of expense, other than of that which is represented by the lost time of the injured person, and by compensation, liability, and medical-aid cost. Travelers Insurance Co. engineers are now investigating accidents on such a basis, and from information already on file they have established results so startling in nature and so far-reaching in the effect they will have on the consideration given to accident prevention as an economic issue that we are somewhat reluctant to make full use of them pending the results of still further research. For example, an analysis of 5,000 specific accident reports, drawn at random from our files, shows that the incidental accident cost, paid by the employer directly, is four times the total cost represented by compensation and liability claims and medical treatment.

Here we at last have something specific, something tangible enough for the trained business executive's mind to grasp. We need no longer deal in generalities with regard to the desirability and the advisability of preventing accidents. We need no longer refer merely to national "economic waste." We can now point to a measurable monetary loss to the employer, which can not be compensated by insurance, and which demands a remedy.

I freely admit the probability of a variation from the figures herein quoted in the incidental cost of accidents, when the facts come to be computed on a national basis, yet enough has been done already to establish the facts approximately. As one employer recently stated when confronted with his direct monetary loss: "It may not be 4 to 1, but I can see that it is something to one, and whatever it is, it is too much."

Every employer to whom we have thus far presented the thought of measurable incidental accident cost has demanded, and has obtained to his satisfaction, proof and details as to the method of measurement. For the information of others who will undoubtedly wish to investigate, let me give an itemized list of the main factors to be considered in calculating costs.

#### *Factors in the incidental cost to employer of accidents to employees*

(Excluding compensation and liability claims.)

(Excluding medical and hospital cost.)

(Excluding insurance premiums.)

(Excluding cost of lost time, except when actually paid by the employer.)

1. Cost of lost time of injured employee.
2. Cost of time lost by other employees who stop work—
  - (a) Out of curiosity.
  - (b) Out of sympathy.
  - (c) To assist injured employee.
  - (d) For other reasons.
3. Cost of time lost by foremen, supervisors, or other executives as follows:
  - (a) Assisting injured employee.
  - (b) Investigating cause of accidents.
  - (c) Arranging for injured employee's production to be continued by some other employee.
  - (d) Selecting, training, or breaking in new employee to replace injured employee.
  - (e) Preparing State accident reports, or attending hearings before industrial commission.

4. Cost of time spent on case by first-aid attendant and hospital department staff, when this time is not compensated by insurance.
5. Cost due to injury to the machine, tools, or other property, or to the spoilage of material.
6. Incidental cost due to interference with production, failure to fill orders on time, loss of bonuses, payment of forfeits, loss of good will, and other similar causes.
7. Cost to employer under employee welfare and benefit systems.
8. Cost to employer in continuing wages, in full, of the injured employee, whereas the services of the employee (who is not yet fully recovered) may be worth only about 50 per cent of their normal value.
9. Cost due to the loss of profit on injured employee's productivity and on idle machines.

I do not contend that this list of factors includes all of the points that might well receive consideration. (The occurrence of an accident often starts a chain of circumstances involving not only lost time, interference with production, spoilage, and weakened morale, but many other conditions as well, that seem to run in an endless and a vicious cycle, as every one will agree that cares to think about it carefully.) I have, however, listed the more obvious factors that are subject to measurement and that are, in my opinion, quite sufficient to prove the point that accident prevention is well worth a place in plant routine, and that it should be dealt with just as definitely and intelligently as other items of so-called overhead expense.

The "incidental cost of accidents" is so great that in substantiating my estimate of a 4 to 1 ratio I find that it is entirely unnecessary to compute many losses which may be common and quite tangible, but which it is hard for persons other than the employer himself to estimate. For example, in the cases I have analyzed the cost of lost time has been calculated in terms of wages only. Granting that an employer makes a production profit on each employee, he loses that profit in addition when his employee ceases production in case of accident.

Nor has there been any systematic attempt to compute cost due to loss of production, other than that of the injured employee and that of those directly implicated by the accident. All employers know something of the endless-chain effect of a serious injury upon efficiency and production. The nerves of employees are shaken; they may gather in groups to talk, or they may individually halt or slow up their production; their attention is diverted from their work, and this may lead to spoilage or even to another accident; in short, the evils of "weakened morale" are far-reaching and costly.

It is true, also, that when an injury halts production losses occur in consequence of delays in fulfilling contracts, and because interruption in one of the steps in chain systems, where each step is dependent upon the previous operation, necessarily affects the system as a whole. Furthermore, the business of selecting and training men is costly, and this cost is materially increased when, through accidents, the labor turnover is affected.

More attention, in this paper, has been directed to trivial accidents than to those of a more serious nature, involving greater compensation or medical costs. This is intentional, inasmuch as experience shows conclusively that accident cost in the aggregate, as measured by payments for compensation and medical aid, is made up chiefly of a great volume of minor injuries. Analysis of "incidental cost" as

related to fatalities, or to permanent total or partial disabilities, does not alter the deduction that an approximate cost to the employer of four times the compensation and medical expense exists. While it is obviously true that a given fatality resulting in a compensable claim of several thousand dollars may not cost the employer four times as much, it is equally true that in other specific cases the cost to the employer is vastly greater. This is well illustrated by a fatality on a steel-construction job, costing \$6,000 in compensation and medical aid, which cost the employer over \$30,000 in property damage and approximately \$5,000 in labor and through delay. This occurred when a derrick collapsed, killing one man, destroying itself as well as a hoisting engine, scaffolding, and other material, and resulting in the complete cessation of operations for several days. Such spectacular instances are not included in my estimates, but I mention this particular one because it offsets or balances the opposite kind of an accident, where the compensable cost is obviously greater than that paid by the employer.

Let me direct attention to example No. 1, below, which demonstrates that a substantial employer cost also results from trivial accidents that are not compensable and that do not require expert medical attention. This point is vital, yet it is invariably overlooked by the employer.

*Example No. 1*

Cost of compensation and medical aid.....	\$0
Additional incidental cost, paid directly by the employer.....	250

Here is the record of an iron foundry that had successfully (?) carried on a no-accident campaign for three months. While there were no compensable or so-called lost-time accidents, yet there were 96 minor eye injuries and burns from molten metal and hot castings. The incidental cost to the employer consists chiefly in the lost time of the injured men and of their supervisors.

*Example No. 2*

Total cost for compensation and medical aid.....	\$11
Total additional incidental cost, paid directly by the employer.....	49

An employee in a machine shop was injured while reaming a casting on an engine lathe. He attempted to grasp the "dog," which had started to revolve when the reamer pulled away from the tail stock center. Three fingers were lacerated.

NOTE A.—The incidental cost was computed as follows:

\$33—injured employee, upon returning to work with his hand bandaged, was engaged for two weeks at work ordinarily performed by unskilled employees at a low wage rate. The employer, while paying full wages for two weeks, received but 50 per cent value.

\$8—time spent by foreman and assistant superintendent in investigating damage to the tools and to the casting, and in planning the replacement of the ruined casting.

\$6—lost time of several employees who left their work to assist or sympathize with the injured man, and to discuss the accident.

\$2—cost of a new reamer, to replace the one broken in the accident.

NOTE B.—The cost of a new casting (estimated at \$50) is not included in this example, nor is the lost time (4 days) of the injured employee, because there may have been some salvage on the casting and the employee received no wages while away from the shop.

NOTE C.—The specific point of value in this example lies in the first item under Note A, i. e., the wages of the convalescent employee continued at 100 per cent, while his services, being rendered on unimportant work, were reduced 50 per cent in value.

[Five other examples are included in the paper by Mr. Heinrich, but are omitted here since the two given above are typical and it is believed they adequately illustrate his point.—Ed.]

To show that a far stronger case could be established by including the unusual, let me cite the following instances in which there were "incidental" losses of special nature:

1. The sale of a fleet of automobiles was lost in consequence of delay in delivering a car, on account of a hand-cranking accident.
2. A huge construction job was held up by city inspectors on account of violations of safety principles, and consequent accidents.
3. Claims made against a public utility (and loss of revenue also), on account of a minor accident causing a short circuit.
4. Injury to an engineer, who was fixing a feed pump, caused low water and the destruction of a steam-boiler battery.
5. Stumbling and a minor foot injury to an employee in a chemical plant caused the accidental and premature mixing of a batch of chemicals and the spoiling of costly materials.

These specific things might not happen again, but others, parallel to them in a certain sense, are likely to occur with considerable frequency; and the omission of all experiences of such special types fortifies the main argument.

The accident statistician will undoubtedly observe that the estimates from which I have drawn conclusions include, as cost to the employer, the wages paid to injured employees while they are employed at reduced efficiency during recovery. They will agree, however, upon investigation, that this is proper in view of the general sentiment that in the final analysis it is economical to get the injured employee back "on the job" as soon as possible, not only because he otherwise represents an idle investment, but also because there is often a possibility of malingering and of false and exaggerated claims.

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### Relative Importance of Hazards in the Construction Industry

**B**ECAUSE workers in the construction industry are constantly moving about from job to job as building operations in various sections demand, this industry presents serious hazards which are not incurred in industries with a fixed habitation. This phase of the accident-prevention movement was discussed by John P. Meade, of the Massachusetts Department of Labor and Industries in an address at the Conference of the Massachusetts Safety Council held in Worcester in May, 1927.

Pointing out that a very encouraging advance has been made in the State in the matter of preventing machinery accidents, which showed a decrease of 60 per cent in 1926 as compared with 1918, the number of accidents caused by gears, belts, and set screws showing a decrease of 73, 54, and 91 per cent, respectively, the speaker then turned his attention to nonmachinery accidents, which showed "no such encouraging history." Chief among these are accidents due to falls, to handling various objects, and to the use of hand tools. Of 51,636 accidents of the nonmachinery type in the year ending June 30, 1926, 8,143 (16 per cent) occurred to men employed in building-construction work, and of these 51 were fatal and 93 resulted in permanent partial disability. The building trades, it is stated, are afflicted with a greater number of nonmachinery accidents than any other industry, due, as already suggested, to the constant shifting of the working force, which multiplies the occasions of danger and

impairs the continuity of accident-prevention work. Interest on the part of the contractors to keep their safety equipment in good condition, and to see that foremen and superintendents exercise proper supervision and that the workmen themselves are instructed in safety methods, is regarded as the best means of promoting accident-prevention work. The experience of certain building contractors appears to show that accidents can be reduced when stimulated by the enforcement of rules providing that working places be made safe for employees. Inspections made by the Massachusetts Department of Labor and Industries have materially assisted in cutting down the number of accidents in this industry. In 1926 there were 3,791 inspections made in building operations, resulting in 2,071 orders being complied with requiring the removal of hazards on stagings, platforms, or other equipment, and the protection of floor openings and hoistways.

Attention was called to the record for 1925 when the largest number of lost-time industrial injuries occurred among employees in the building trades and, it was added, "this record was very nearly equaled" in 1926. In one case, where 69 subcontractors were engaged in the work, although constant supervision was given to safety provisions, five lives were lost. One very constant source of danger in this industry is falling objects. Another is removal of safety rails and toe boards around floor opening or wells; when the contractor does provide such safety rails subcontractors or workmen frequently set them aside and fail to replace them. Floor openings "should be given better supervision." Explosions arising from the use of solvents, such as gasoline, in plastic floor materials is noted as the cause of much apprehension among workingmen in the building trades. This is a new hazard brought about by modern methods of building, and careful attention to proper ventilation and the removal of combustible vapors is suggested as a remedy.

Citing the cost of accidents the speaker stated that in 17 classifications of employment in the building industry in Massachusetts for the year 1924, the total pay-roll tabulation was \$71,272,000, on which the 1927 compensation premium rate was increased an average of 20 cents per \$100.

This included a flat increase of 3.4 per cent which was applied to all rates after July 7, 1924, on account of the increase in certain payments under the compensation law. This leaves at present approximately 12 per cent increase in the last three years on every \$100 on the pay roll. It is significant that in the erection of frame structures of iron and steel, the rate per \$100 on the pay roll on January 1, 1924, was \$12.80, while on January 1, 1927, it was increased to \$14.80. This means that it may be necessary to raise \$87,365.46 more than was raised last year in order to meet compensation claims in the building trades during the year 1927.

While compensation payments serve a good purpose, the speaker was convinced that accident-prevention work serves a greater purpose and that "protecting the human side of industry in the building trades is conserving the economic resources of the State." He believes that accident-prevention work in this industry should be organized from within, and that the saving of human life should be made an integral principle in the conduct of these operations. In this constant waste of man power in a branch of industry where to a

large extent injuries are "man-made and can be man-stopped" the speaker sees a challenge to experts in safety promotion and to the State labor departments as well.

### Accident Record of Certain Alabama Coal Mines

**W**HEN it is considered that the most prolific cause of underground accidents in coal mines, according to United States Bureau of Mines records covering the years 1916 to 1925, is falls of roof or face, it is gratifying to find in Modern Mining (Pittsburgh, Pa.) for June, 1927, a report of a group of coal mines in which no fatal accidents from this cause have occurred during a period of five years, and another group in which no such accidents have occurred during a two-year period. Both groups of mines are located in the State of Alabama.

Figures shown in United States Bureau of Labor Statistics Bulletin No. 425 indicate that falls of roof or face were responsible for fatality rates ranging from 0.57 per 1,000,000 hours' exposure in 1916 to 0.70 in 1924, with 1921 and 1922 somewhat higher (0.72 and 0.74, respectively). These rates of 0.57 and 0.70 are, respectively, 148 per cent and 94 per cent higher than the rates for the next highest cause of accidents.

In the report as to Alabama mines it appears that a 20 per cent reduction in the class of accidents to which reference has been made was achieved in 1926, with the rather noteworthy record of 86 mines reporting no fatal accidents from this cause during a 5-year period, and 141 coal mines with a similarly clear record covering a 2-year period. This remarkable showing is ascribed to a campaign of strict enforcement of timbering rules, constant supervision, and frequent inspections of the roof by safety inspectors, assistant mine foremen, or others detailed to this important work, and an educational plan by which workers are carefully instructed and trained in safety methods.

### Fatalities in the California Petroleum Industry in 1926

**A**GRADUAL, although not very marked, decrease in the number of fatal accidents in the petroleum industry in California during the years 1923 to 1926 appears from the records of the State industrial accident commission as compiled by the United States Bureau of Mines.<sup>1</sup> In 1926 there were 53 fatalities, in 1925 there were 59, in 1924 there were 61, and in 1923 there were 75, these figures showing the results of accident-prevention work in that industry in California. Fatalities on board tankers and oil barges and those occurring "off shore" are not included.

The drilling and producing division reported 25 fatalities, which is about 47 per cent of the total, but represents a reduction of 19.35 per cent from the number in 1925 when 31 men were killed. This division of the industry is regarded as particularly hazardous, and

<sup>1</sup> United States. Department of Commerce. Bureau of Mines. Reports of investigations, Serial No. 2814: Fatalities in the California petroleum industry during the calendar year 1926. Washington, June, 1927. 19 pp., mimeographed.

yet it is pointed out that a reduction of 57.63 per cent in the number of fatal accidents occurred from 1923 to 1926, showing "clearly what concentrated effort toward the elimination of accidents in the oil industry will accomplish."

In the pipe-line and transportation division and the refineries division, two disasters of some magnitude took a toll of 10 lives which, in these two divisions alone, represents an increase of 27.8 per cent in the number of fatalities in 1926 as compared with 1925. In spite of this the number of fatal accidents in the petroleum industry as a whole was reduced a little over 10 per cent in 1926, or 29.3 per cent as compared with 1923.

From a production standpoint there were 8,960,000 barrels of oil produced for each fatality in 1926, in the drilling and producing division, as compared with 7,430,000 in 1925, 5,230,000 in 1924, and 4,460,000 in 1923. Stated in terms of fatality rates, there were 1.12 fatal accidents per 10,000,000 barrels of oil produced in 1926, 1.35 in 1925, 1.91 in 1924, and 2.24 in 1923, or an average for the 4-year period of 1.68 fatalities per 10,000,000 barrels.

It is stated that only 7 (28 per cent) of the 25 fatal accidents in the drilling and producing division in 1926 could have been prevented by the installation of safeguards and safety devices as provided in the general petroleum industry safety orders for drilling and production issued by the Industrial Accident Commission of the State of California, whereas nearly 50 per cent of the fatalities in 1923, the year before the enactment of the safety orders, could have been prevented by the use of safeguards.

Most of the report is given over to a detailed review of how the accidents in the various divisions of the industry occurred, together with suggestions for avoiding repetition.

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#### Coal-Mine Accidents in West Virginia, July, 1924, to December, 1925

DURING the calendar year, 1925, the coal mines of West Virginia, working an average of 194 days, employed an average of 110,985 persons (or 111,708, if 723 coke workers are included), who produced 123,061,985 tons of coal at a total value of \$207,974,755. The wages received by 12,163 pick miners for mining run-of-mine coal was 81 cents per ton, based on a production of 1,855 tons each, giving the average pick miner an income of \$1,503 for the year.

These figures are brought out in the recent report of the West Virginia Department of Mines,<sup>1</sup> covering in some instances 18 months ending December 31, 1925, and in other cases only the calendar year 1925. This report is prepared in two sections, the first section including a brief summary of the statistical data as a preliminary chapter, followed by production statistics, reports of mine inspectors, etc., while the second section includes accident records.

It appears that there were 686 fatal and 3,394 nonfatal accidents during this year and a half period. During the 12-month period

<sup>1</sup> West Virginia. Department of Mines. Annual report, from July 1, 1924, to Dec. 31, 1925. Charleston, 1926. 324 pp.

ending with June 30, 1925, there were 551 fatal accidents, indicating a much better record during the 18-month period. During the latter period the number of killed per 1,000 inside workers was 6.96, which is somewhat higher than in the 12-month period, when it was 5.29. For each million tons of coal mined, based on a total of 176,306,656 tons, 3.89 men were killed and 19.25 were injured. During the 12-month period the number of killed per million tons of coal mined was 5.45. As might be expected in the coal-mining industry, the largest proportion of those killed (52 per cent) and of those injured (31 per cent) was due to falls of coal, slate, and roof, with mine cars the second contributing cause (16.9 per cent of the fatal and 30.3 per cent of the nonfatal accidents).

The report tabulates the fatal and nonfatal accidents by causes, by counties, by companies, and by length of experience of the workers.

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### Effective Rock Dusting of Coal Mines

A SUMMARY of the policy on rock dusting, advocated by the United States Bureau of Mines, by George S. Rice, published as Circular No. 6039, gives the requirements for effective rock dusting of coal mines in order to prevent propagation of mine explosions. The Bureau of Mines recommends rock dusting all coal mines, except anthracite mines, in every part, whether in damp or dry condition, and in addition, the erection of rock-dust barriers to sectionalize the mine.

The specifications for rock dusting have been determined by nearly 1,000 explosion tests in the bureau's experimental mine near Pittsburgh and provide that after the coal dust is cleaned up as thoroughly as practicable, all open accessible parts of a mine should be dusted, including slopes, entries, crosscuts, and rooms, headings and pillar workings, to within at least 50 feet of the face with sufficient rock dust so that the remaining coal dust plus the rock dust contains at least 65 per cent of inert or incombustible matter. The first dusting may require from 3 to 5 pounds per linear foot of passageway.

Limestone and dolomite dusts are to be preferred as they are free from silica and are whitish in color, but whatever the dust used it should not be unduly absorbent of moisture or have a tendency to pack and should not have more than 25 per cent free silica or contain more than 2 or 3 per cent of combustible material.

The rock dust in the mine should be sampled systematically and a minimum of 20 samples should be gathered each month in a mine of small size and more in larger mines, the average being at least one sample for each thousand tons of coal produced. The records of analyses of dusts in specified zones should be kept, as well as times of re-rock dusting each zone, and maps showing the rock-dust zones and rock-dust barriers should be posted in the mine office and in fire bosses' "shanties."

Tests of rock-dust barriers, which are either movable or fixed shelves extending across passageways close to the roof, have shown that in order successfully to limit the extent of an explosion they must be loaded so that in case of an explosion they will discharge and scatter

from 50 to 100 pounds of rock dust per square foot of cross section immediately before the arrival of the flame. In the experiments many types of barriers failed because the rock dust was not discharged quickly enough; there was not sufficient rock dust; or it was discharged in a mass, which is especially liable to happen if the rock dust is so damp that it sticks together. However, rock-dust barriers, even if successful, are not equivalent to general rock dusting and are regarded by the bureau as secondary defenses.

Experiments on the relative explosibility of coal-mine dusts show that while different factors, such as the amount of noncombustible dust present, the amount of moisture, the fineness of the coal dust, the percentage of volatile combustible matter, and the percentage of inflammable gas present all affect the explosibility of the dust, some combining to increase while others decrease the explosibility of a given mine dust, the only safe procedure for the prevention of disastrous explosions is to rock dust thoroughly in every part of the mine.

Practical demonstration of the effectiveness of rock dusting was afforded by two coal-mine explosions<sup>1</sup> occurring in Pennsylvania in April. In one of these explosions six men were killed and five men were burned and suffered from gas poisoning, but the lives of 400 who were working in other parts of the mine were saved, as the explosion was limited by the rock dust to the entry where it originated. In the other explosion, which killed four men, the lives of 300 miners were saved. This explosion, which occurred in the main haulage way, blew out every window in the town and rocked the country for miles around, but was extinguished by the rock dust without doing further damage within the mine.

Since 1924, six States—Utah, Pennsylvania, Wyoming, West Virginia, Indiana, and Ohio—have enacted laws providing for the rock dusting of bituminous mines but there are still 19 bituminous States that have not taken any action toward the prevention of these disasters.

<sup>1</sup> American Labor Legislation Review, June, 1927, pp. 129, 130: "Rock dust again proves effective as a life saver."

# INDUSTRIAL HYGIENE

## The Toll of Industrial Noise

THE effects on the human system of various kinds of noise met with in industrial employment and some of the methods by which noise and vibration may be eliminated are discussed by C. Fenno Faulkner in the June, 1927, issue of *Factory*.

Noise is more than an unpleasant condition of industry; it is a cause of shattered nerves and impaired hearing, and accidents, lowered morale, and similar occupational disturbances may also be attributed in part to its effects. We have tried to make a virtue of necessity by regarding the senseless clamor and roar of industry as an indication of its vigorous activity, the writer says, while in reality noise is often only a sign of wasted energy, of poor design, or of hurried ignorance. The reason that the bad effects of loud and continuous noise have not been more generally recognized, he believes, is because the effects are both insidious and cumulative in their action. Also, even though noise and other vibration may be responsible for an accident, sickness, or reduced efficiency, it is very difficult to fix the responsibility.

Various writers on industrial diseases are cited to show the rôle of noise in producing fatigue, deafness, and functional nervous disorders. In disease of the middle ear caused by excessive noise, vertigo is a common symptom, sometimes with nausea and faintness. Since dizziness as an accompanying symptom is found more frequently among mill and factory operatives whose work subjects them to vibrations from the machinery in addition to the noise, there seems to be no doubt that noise and vibration contribute their share to accidents in such industries. "It has been proved that loud and continuous noise lessens the ability to concentrate, to follow a consistent line of thought, or to meet emergencies where quick, coherent thinking is required. Aggravate this condition with exposure to direct vibration and you have a possible explanation of some of those seemingly needless accidents that one encounters so frequently."

Since there is no question that noise is both offensive and injurious, it is evident that to minimize its harmful effects it is necessary to reduce, isolate, or absorb the undesirable vibrations or to alter the tone of certain noises so as to render them less objectionable. Vibrations are transmitted in the following ways: Direct to the air from the vibrating bodies, through the part of the structure to which the vibrating bodies are attached, from the structure to the air, by direct contact of the operative with the vibrating body, and by direct contact of the operative with the floor.

There are various ways of absorbing sound and vibrations. Where heavy machinery is used much of the vibration can be absorbed by the use of thick resilient mats between the base of the engine or machine and its foundation, cork having proved to be the best material for this purpose. Spring mountings of the self-aligning type are successful particularly in the case of high-frequency vibrations, and there are various silencing devices for use on different types of machinery, although, in general, manufacturers of machinery have yet to learn the importance of quiet operation of their products.

Continuous noises that are of high pitch but not necessarily loud are the ones most likely to cause chronic ear troubles, and the lessening of such noises lies in better design and the use, wherever possible, of shock-absorbing materials. It is considered possible also that much relief would result from a small periodic change in the speed of rotating parts, as a periodic change in pitch would relieve the ear.

Sound-absorbing materials include compressed cork, which at a thickness of  $1\frac{1}{2}$  inches absorbs sound 14 times as rapidly as bricks, plaster, or glass; a new material made out of sugar-cane fiber which is much in use in offices, salesrooms, radio broadcasting stations, and other places where a minimum of sound reverberation is desired; felt; and a special type of plaster which has been developed for this purpose.

In conclusion the writer says:

This problem of noise prevention can be solved only by scientific research. We must learn what types and conditions of men are physically unfitted to withstand continuous noise. We must have more definite standards for measuring different noise effects on human fatigue and health and how to offset or eliminate them. The duty of removing this nuisance rests on industry. Since it has been found that noise has a direct relation to human fatigue any activity directed to this end should prove very profitable.

### Labor Laws as a Means of Preventing Diseases of Occupation

THE extent to which labor laws prevent diseases of occupation was discussed by John Roach, deputy commissioner of labor of New Jersey, at the fourteenth annual convention of the Association of Governmental Labor Officials.

There is no doubt, Mr. Roach said, that a large percentage of the ill health among workers is due to improper working conditions, exposures to poisonous trade substances, devitalizing fatigue, and sustained effort beyond the strength of the individual, and that these are among the causes which send 4,000,000 people to the hospitals each year. When, on the other hand, industry operates carefully so that poisonous substances are handled by trained men; when dusts, gases, and fumes are collected at their point of origin; and when workmen in general are given health protection there is no doubt that there is a most favorable effect on the health of the working groups.

Attention to proper sanitation and ventilation of workshops is comparatively recent. A law passed in New Jersey in 1911 gave the commissioner of labor authority to order the installation of exhaust fans for gases, fumes, and dusts, and, owing to the extremely liberal construction that has been placed on the act, it has been extended to cover almost all the health work that has been done in the industries of the State.

For many years attempts were made in New Jersey to extend the workmen's compensation act to include occupational diseases and, after a thorough investigation had been made by a commission appointed by the governor, the law was extended to cover a specified group of occupational causes. Nearly all the substances which by reason of their cumulative effects could be classed as causing occupational diseases are included. Under this act, if a workman, for example, enters a nitrating vessel in which benzol has been used and is overcome by the vapors and dies as a result of the exposure, this is classed as an industrial accident and not an industrial disease,

while if a workman becomes seriously ill or dies as a result of the cumulative effect of daily exposure to benzol vapors, the case is classed as an industrial disease.

Although it would not be possible to establish minimum standards of safety without the enactment of laws, it is only when such laws represent the will of the community, safeguard the best interests of the people, and definitely establish the legal rights and responsibilities of the citizens that they become effective in promoting social welfare. The establishment of workmen's compensation was a distinct step forward, but Mr. Roach considers that the temptation is to exaggerate the social value of the sums expended in settlements for occupational injuries, while the measures for prevention which resulted from the enactment of such legislation are immeasurably more important. The same is true of occupational disease legislation. The effect of laws requiring safeguards such as exhaust systems for the removal of dust and fumes has been to remove processes involving such hazards from their former dark and insanitary surroundings to well-lighted workrooms, with the result that a better product is obtained, the health of the workers is conserved, and their comfort is greatly increased. Health statistics have proved that these changed conditions have an important bearing on the health of the workmen. There has been the same result in the trades in which poisonous substances are used, the health statistics having shown that careless operating practices bring physical disaster, while careful methods attract a better class of workmen, make them more contented in their work, and at the same time reduce the compensation claims that otherwise might accrue from poisoning and ill health.

For several years in New Jersey it has been a requirement that every industrial disease should be carefully investigated, and the services of an expert consultant in industrial chemistry are available in cases which involve complicated and difficult problems in chemical manufacture, while a skilled technician is employed for the purpose of making atmospheric tests where operations involve exposures to subtle trade poisons in gaseous form.

#### OCCUPATIONAL-DISEASE COMPENSATION CASES OCCURRING AND CLOSED DURING 1926

Occupational disease	Total number of compensable cases	Deaths	Total days' time lost	Total indemnity paid
Amido derivatives of benzol (anilins).....	2	-----	50	\$37
Anthrax.....	11	-----	358	661
Arsenic.....	1	-----	230	383
Heat and light (including heat from asphalt—not burns).....	1	-----	22	36
Lead poisoning.....	32	11	7,816	9,478
Mercury.....	2	-----	616	1,239
Nitro derivatives of benzol (diartrinitrobenzol).....	8	-----	365	808
Occupational activity (cellulitis, etc.).....	23	-----	606	1,126
Not otherwise classified.....	1	-----	32	61
<b>Total.....</b>	<b>81</b>	<b>1</b>	<b>10,185</b>	<b>13,879</b>

<sup>1</sup> Painter, 51 years of age.

The preceding table shows the number of cases of occupational disease occurring during the past year, the time lost, and the total

amount of indemnity paid. It is considered that, in addition to the 81 cases which are included because they were entitled to compensation, at least three times as many occurred that did not cause disability beyond the waiting time required by the occupational-disease act.

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### Pennsylvania Conference on Industrial Nursing

A CONFERENCE on industrial nursing held in Harrisburg, Pa., in June, was attended by more than 200 industrial nurses, medical directors, employers, and State officials, according to a press release issued by the Pennsylvania Department of Labor and Industry. The conference was called in recognition of the importance of industrial nursing service and to discuss the needs and opportunities of this phase of industrial progress.

The morning session was devoted principally to a discussion of industrial nursing in relation to safety and the duties and responsibilities of the industrial nurse in the development of the safety program were stressed by the various speakers. Some of the points brought out were the need for strong personality and sympathetic insight on the part of the industrial nurse who through her direct contacts with the injured men often has the opportunity to accomplish the most effective kind of safety work; the importance of cooperation on the part of the nurse with the safety engineer and the foreman in noting the causes of the common types of accidents and removing their cause; the value of extending the work of the industrial nurse to the homes of the workers in order to free them from worry as to the health of their families; and the need for close cooperation between the State inspector and the industrial nurse.

The subject of the afternoon session was industrial nursing and health, and the different speakers emphasized especially the value of preventive medical work. Among the important points listed as necessary in developing a health program were complete and accurate nursing and medical records, which if properly kept will show the major health problem in any organization; maintaining the physical standard of the employees by scientific practical follow-up work in the home, for which an opportunity is presented to the plant nurse; and attention on the part of the nurse to the origin of diseases which appear to develop as a result of the conditions or processes of the industry, as there is a real opportunity for industrial nurses to contribute in this way to the solution of the problem of industrial diseases.

The health problem in industry was said by one speaker to be even more important than the problem of accidents, and lack of interest in the subject was given by him as one of the reasons why preventive health work for industrial workers has developed so slowly. The hope for the advance of health standards for industrial workers, he said, is not through the efforts of either the workers or their employers, or of community health agencies alone, but only through the combined efforts of all these groups.

out of publication, this document is the best evidence of the original instrument or documents on which it was based. It is not to be construed as an act of the Congress of the United States.

## WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

### **Districts and District Offices Established Under Longshoremen's and Harbor Workers' Compensation Act<sup>1</sup>**

**I**N ACCORDANCE with the provisions of section 39 (b) of the longshoremen's and harbor workers' compensation act, the United States Employees' Compensation Commission hereby establishes the following compensation districts, each district including the navigable waters of the United States within the areas specified and the waters of the lakes and oceans and the bays and inlets thereof bordering upon the areas specified:

*District No. 1* comprises the New England States—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. The office of a deputy commissioner of the district will be at Boston, Mass.

*District No. 2* comprises the port of New York, including that part of New Jersey legally included in the port of New York and the State of New York, except that part of New York State north and west of a line 30 miles from the shore of Lake Erie and Lake Ontario and the Niagara and St. Lawrence Rivers. The office of the deputy commissioner of the district will be at New York City.

*District No. 3* comprises the State of New Jersey, except that part legally included in the port of New York, and the States of Delaware and Pennsylvania, except that part of the State of Pennsylvania north and west of a line 30 miles from the shore of Lake Erie. The office of the deputy commissioner of the district will be at Philadelphia, Pa.

*District No. 4* comprises the State of Maryland and the District of Columbia, including the Potomac River. The office of the deputy commissioner of the district will be at Baltimore, Md.

*District No. 5* comprises the State of Virginia, except the Potomac River, and the State of North Carolina. The office of the deputy commissioner of the district will be at Norfolk, Va.

*District No. 6* comprises the States of South Carolina and Georgia and that part of Florida east of the eighty-seventh degree of west longitude. The office of the deputy commissioner of the district will be at Savannah, Ga.

*District No. 7* comprises that part of the State of Florida west of the eight-seventh degree of west longitude and the States of Alabama,

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<sup>1</sup> The Labor Review for April, 1927 (pp. 18-20), carried a brief account of the enactment of the longshoremen's and harbor workers' compensation act. The law is effective from July 1 as the sole remedy for injured workers within its scope. It provides for administrative districts in such number as the United States Employees Compensation Commission deems advisable. In conformity with this provision, the present order was issued June 18, 1927.

Mississippi, Louisiana, and Arkansas, but excluding that part of the Mississippi River between Arkansas and Tennessee. The office of the deputy commissioner of the district will be at New Orleans, La.

*District No. 8* comprises the State of Texas, including that part of the Red River between Texas and Oklahoma. The office of the deputy commissioner of the district will be at Galveston, Tex.

*District No. 9* comprises that part of the lake district in the States of Ohio, Pennsylvania, and New York extending 30 miles inland from the shore line of Lake Erie and Lake Ontario and the Niagara and St. Lawrence Rivers; also the lower peninsula of the State of Michigan, except that part west and north of a line 30 miles from the shore of Lake Michigan and the Strait of Mackinac. The office of the deputy commissioner of the district will be at Cleveland, Ohio.

*District No. 10* comprises the rest of the lake district, namely, an area 30 miles wide along the shore of Lake Michigan in the lower peninsula of Michigan, and in the States of Indiana and Illinois; also all of the northern peninsula of Michigan, and the States of Wisconsin, Minnesota, North and South Dakota, Nebraska, and Iowa, except that part of the Mississippi River between the States of Iowa and Illinois. The office of the deputy commissioner of the district will be at Chicago, Ill.

*District No. 11* comprises the State of West Virginia, the State of Ohio, except north of a line 30 miles from Lake Erie, the State of Indiana, including the Wabash River between Indiana and Illinois, but excluding the territory north of a line 30 miles from the shore of Lake Michigan; also the State of Kentucky, including that part of the Ohio River between Kentucky and Illinois and that part of the Mississippi River between Kentucky and Missouri, and the State of Tennessee, including that part of the Mississippi River between the States of Tennessee, Missouri, and Arkansas. The office of the deputy commissioner of the district will be at Louisville, Ky.

*District No. 12* comprises the State of Illinois, including that part of the Mississippi River between Illinois and Iowa, but excluding the territory east of a line 30 miles from the shore of Lake Michigan and excluding that part of the Wabash River between Illinois and Indiana and that part of the Ohio River between Illinois and Kentucky; also the State of Missouri, including the Missouri River between Missouri and Nebraska, but excluding the Mississippi River between Missouri, Kentucky, and Tennessee; also the States of Kansas and Oklahoma, excluding the Red River between Oklahoma and Texas. The office of the deputy commissioner of the district will be at St. Louis, Mo.

*District No. 13* comprises all of California, Arizona, New Mexico, Nevada, Utah, and Colorado, and the Territory of Hawaii. The office of the deputy commissioner of the district will be at San Francisco, Calif.

*District No. 14* comprises the States of Washington, Oregon, Idaho, Montana, and Wyoming, and the Territory of Alaska. The office of the deputy commissioner of the district will be at Seattle, Wash.

**Recent Compensation Reports****Colorado**

THE ninth report of the Industrial Commission of Colorado covers the biennium December 1, 1924, to December 1, 1926. Heretofore the commission's reports have covered a single year.

The State maintains an insurance fund in competition with other lines of compensation insurance. The premium income for all insurance carriers for the year 1925 was: Stock companies, \$1,033,795; mutual companies, \$351,429; State fund, \$554,869—a total of \$1,940,092. Losses paid by stock companies during the year amounted to \$567,365; by mutual companies, \$139,083; and by the State fund, \$279,973—a total of \$986,421. For 1926 figures are available only for the State fund, its premium income for 11 months of the year being \$575,496, and the losses paid \$279,819.

A recommendation is made that the arbitrary limitation as to operating expenses established by the legislature be done away with and a provision made whereby the fund shall be applicable not only to the payment of losses but also to the payment of the fund's expenses, thus removing the fund's expenses from the appropriation bill. Mutual companies have an average operating expense of 25 per cent, while the average expense of operating the State fund for the period from January 1, 1922, to November 30, 1926, was 4.8 per cent.

The income of the State fund for the year ending November 30, 1926, was \$587,254 from premiums and \$85,410 from interest, other items together with financial transactions making the year's income \$1,085,690. Of this sum \$305,833 was paid in compensation and medical aid, \$55,960 in dividends, and \$27,809 in operating expenses.

The claim department in 1925 reported 18,143 first reports, 20,500 supplemental reports, 5,807 claims for compensation, 166 lump-sum applications, 1,879 referee awards, and 577 commission awards, while in 1926 it reported 19,797 first reports, 22,000 supplemental reports, 5,584 claims for compensation, 176 lump-sum applications, 2,312 referee awards, and 572 commission awards. Of the 131 lump-sum applications granted in 1926, 43 were for the purpose of purchasing homes.

No data are given as to cause, industry, or nature of injury except in a very general way. In 1925 there were 152 amputations, 30 cases of permanent total disability, 157 cases of permanent partial disability, and 5,468 cases of temporary total disability. There were 83 cases of fatal claims involving persons wholly dependent and 19 with partial dependents. No dependents appeared in 41 cases. In 9 cases there were foreign dependents. In 1926 there were 178 amputations, 25 permanent total disability cases, 163 permanent partial disability cases, 5,241 temporary total disability cases, 80 fatal claims involving persons wholly dependent, 27 with partial dependents, 37 with no dependents, and 11 with foreign dependents.

The average weekly wage in 1925 was \$25.02, average weekly rate of compensation \$10.74, and the average number of weeks of disability 9.84, while in 1926 the figures were \$24.95, \$10.63, and 9.26, respectively.

**West Virginia**

THE annual report of the Compensation Commissioner of West Virginia for the year ending June 30, 1925, gives a very detailed account of the different classes of awards for permanent disabilities and deaths. There were 31,631 injuries reported during the year, of which 550 were fatal.<sup>1</sup> There were 25 awards under the State fund for permanent total disability and 1,294 for permanent partial disability.

Compensation payments for the year amounted to \$3,354,479, distributed as follows: Medical aid, \$487,730; funeral benefits, \$78,012; temporary disability cases, \$922,210; permanent total disability cases, \$94,121; permanent partial disability cases, \$953,405; and fatal accidents, \$819,002.

Two catastrophes occurred during the year, both in coal mines, in which 36 persons were killed. There were no known dependents in 5 cases, but in the other 31 cases there were 22 dependent widows, 66 children, and 8 parents.

The report of the fund June 30, 1925, discloses \$12,805,180 as assets, reserves for claims amounting to \$12,093,820, and deposits to secure payment of premiums, \$561,089, leaving a general surplus of \$150,271.

Benefits paid during the life of the act (October 1, 1913, to June 30, 1925) amounted to \$17,741,075 and administration expenses to \$1,129,937, these items with the reserves, general surplus, etc., balancing receipts. The cost of administering the fund has been 4.12 per cent of the earned premium.

Since the inception of the act there have been approximately 280,000 injuries reported and awards made, of which 7,372 were for permanent partial disability, 312 for permanent total disability, and 9,982 to dependents on account of 3,747 fatal injuries. Of the dependents in fatal cases 2,871 were widows, 6,330 minor children, 8 invalid children over 15 years of age, and 773 parents and others.

As is quite naturally expected, coal mining leads the list of injuries reported during 1924-25, with 13,401 nonfatal cases and 455 fatal cases, metal workers ranking next in the number of nonfatal cases (5,755), but fourth in fatal cases, the number being but 18 as against 31 for contractors and 28 for lumber.

Of the temporary disabilities for which awards were made, 4,584 are attributed to falling objects, 3,528 to railway, trams, etc., 3,414 to hand tools, etc., 2,388 to flying objects, 1,633 to heat and electricity, the percentage of the total number of cases being as follows: 20.2 for falling objects, 15.9 for railway, trams, etc., 15.1 for hand tools, etc., 10.5 for flying objects, and 7.2 for heat and electricity.

Permanent total injuries are presented by class, injury, and cause. Permanent partial awards are likewise presented in detail, showing awards and liability by class, cause of injury, etc. Fatal cases are likewise shown, together with the number of dependents and their relationship to the deceased.

There were also reported 1,122 injuries covered by employers carrying their own risk. Orders were issued for payment of 518 temporary total awards amounting to \$26,074 and for medical aid,

<sup>1</sup> Dependency was proven and awards made to 388 widows, 845 children, 35 fathers, 36 mothers, and 68 others.

etc., \$16,152. Awards were made in 36 permanent partial cases in the amount of \$38,474. Funeral awards were made in the amount of \$3,125, covering 23 claims with 13 dependent widows, 34 children, and 5 parents.

Other tables are shown giving ages of persons permanently or fatally injured, marital conditions, nationality, etc., and a résumé of operations of the act throughout its existence.

#### Wisconsin

THE Industrial Commission of Wisconsin has recently issued its thirteenth report on the administration of the workmen's compensation law. Heretofore these reports have been issued annually, but owing to the small number of cases of general interest decided by the commission during the period July 1, 1924, to June 30, 1926, this report covers a biennium. In addition to data covering 1924-1926, there is a table covering the period, September 1, 1911 (the date of inception of the act), to June 30, 1926. During this period 253,408 cases were reported. Of these, 217,664 were settled, 24,200 were not compensable, and 11,544 were still open at the end of the period. Indemnity awarded during the period amounted to \$25,561,698, and medical, etc., aid totaled \$8,283,489, making a total of \$33,845,187 for all benefits paid. The average amount of indemnity per case was \$117, and average medical, etc., aid was \$38.

During the year ending June 30, 1925, 24,064 cases were reported, 21,349 of which were settled at a total cost in indemnity and medical aid of \$4,615,369, an average of \$216 per case, while in 1926 the number of cases reported was 26,322, of which 21,084 were settled at a total cost in indemnity and medical aid of \$4,624,892, making the average per case \$219.

Of the awards made in 1925, 194 were for fatal cases, 4 for permanent total disability, and 653 for permanent partial disability. In 1926 awards were made for 155 fatal cases, 3 for permanent total disability, and 790 for permanent partial disability. Funeral expenses in 1925 amounted to \$30,558 and in 1926 to \$26,087, which indicates that the maximum allowance of \$200 is quite frequently paid.

There are other tables showing the number of cases dismissed and grounds therefor, the number of actions for review in the circuit court and the supreme court and the action taken by them. Several pages of the report are devoted to excerpts of the decisions of the commission during the biennium.<sup>2</sup>

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#### Silicosis, Pneumoconiosis, and Caisson Disease Made Compensable in Ontario, Canada

THE report of the Workmen's Compensation Board of Ontario for 1926 states that during the year the list of industrial diseases covered by the workmen's compensation act had been enlarged to include silicosis in mining communities; pneumoconiosis in quarrying, crushing, and grinding of stone and metals; and caisson disease in deep sewer work.

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<sup>2</sup> The Wisconsin Labor Statistics, a monthly publication of the industrial commission gives more detailed information relating to the subject of compensation than does the report above referred to, and articles from that source are printed from time to time in the Labor Review.

The most important of these diseases in Ontario from the standpoint of the numbers involved is silicosis, a very considerable number of miners suffering from the disease having been found in the mining camps. In a conference between the representative mine owners, the department of industrial hygiene, and the workmen's compensation board, it was agreed that three distinct stages of the disease should be recognized in awarding compensation. These are the ante-primary, the primary, and the secondary stages. In the first stage in which silicosis is present but has not progressed far enough to cause physical impairment if the man is removed from further exposure to silica dust, compensation to the amount of \$500 is allowed to cover the cost of rehabilitation in another industry. In the primary stage, in which some degree of impairment is present, the compensation was fixed at \$1,000 to cover permanent disability and rehabilitation in another industry; and in secondary silicosis, which is usually complicated with tuberculosis, when total disability is reached the compensation for permanent total disability is awarded. Early in 1927 a silicosis board, consisting of four doctors, three from the department of public health and the reporting physician, was established. The decisions of this board as to whether the claimant is suffering from the disease and, if so, as to what stage he is in must be unanimous, and the decisions of the board are final.

In connection with several deaths from caisson disease in Toronto in sewer work which was being carried on in compressed air it was decided that such deaths could not be regarded as of an accidental nature, but that they are incidental to the carrying on of the work in compressed air, and therefore in order to be compensated would have to be added to the industrial-diseases section of the act. The disease was accordingly added to the provisions of the act by regulation of the board, to take effect from January 1, 1926.

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### Pensions, Poor Relief, and Unemployment Insurance in England and Wales

THE Statistical Abstract of the United Kingdom, of which the seventieth number was recently issued by the British Board of Trade,<sup>1</sup> contains a series of tables showing the number of recipients of pensions and poor relief for some years past and giving the total receipts and expenditures of the unemployment insurance fund.

In 1911 old-age pensions were paid to 613,873 persons, 218,158 being men and 395,715 women; the amount paid in such pensions for the year ending March 31, 1911, was £6,248,000. In 1925 those receiving old-age pensions numbered 900,536, an increase of 46.7 per cent. There was a difference in this respect between the sexes, the men having increased to 332,360, or by 52.3 per cent, while the women numbered 568,176, 43.6 per cent more than in the earlier year. In 1911 the great majority of recipients, 569,130, drew a pension of 5s. a week, successively smaller groups receiving less than this by 1s., until 4,134 had but 1s. Up to 1919 the highest pension remained

<sup>1</sup> Great Britain. Board of Trade. Statistical abstract for the United Kingdom for each of the 15 years from 1911 to 1925. London, 1927. [Cmd. 2849.]

stationary at 5s., but then the amount was increased, and 1920 saw 658,346 of the pensioners drawing 10s. and only 899 in the 1s. group. In 1925 the number receiving 10s. was 878,584, or over 97 per cent of the total. The amount paid out in old-age pensions in this year was £22,156,000.

The net total of persons receiving poor relief of any kind on January 1, 1912, was 801,881. The number gradually sank through the war years, reaching its lowest point, 554,617, on January 1, 1919. Thereafter it rose suddenly and reached its maximum in January, 1923, when it stood at 1,537,990. On January 1, 1926, it was 1,439,810, a number larger by 80 per cent than it had been 14 years earlier. The number of those receiving relief in their homes is perhaps more significant than the total, which includes the insane and others requiring institutional care. The recipients of outdoor relief rose from 408,106 in 1912 to 1,003,399 in 1926, their ratio to each 10,000 of the estimated population rising from 113 to 258. The public expenditure on relief of the poor and matters connected therewith rose meanwhile from £14,463,902 in 1912 to £36,841,768 in 1925, the latest year for which data are given.

The unemployment insurance scheme at its outset in 1911 covered only a limited number of the workers, and for nine years it grew slowly, its receipts far exceeding its expenditures and its reserve fund increasing in a satisfactory manner. When the brief postwar boom was succeeded by a period of acute depression the scheme was suddenly extended to cover most of the working classes, domestic and agricultural workers being the chief exceptions. The data as to receipts and expenditures begin with the date at which the plan was amended, November, 1920. Receipts from that time to July 5, 1925, were as follows:

#### RECEIPTS AND EXPENDITURES OF UNEMPLOYMENT INSURANCE FUND

Year	Receipts						Total expenditures	Balance of fund at end of period
	Workers and employers	State	Interest	Section 41 <sup>1</sup>	Other receipts	Total		
Nov. 8, 1920, to July, 1921	£8,916,940	£2,168,639	£579,263	£1,357,315	£8,289	£13,030,446	£34,756,235	£99,798
1921-22	30,553,608	11,057,901	553,411	820,260	38,905	43,024,086	58,452,711	14,959,256
1922-23	34,029,359	12,166,266	—	443,659	34,022	46,673,306	47,880,263	16,148,267
1923-24	36,743,365	13,184,784	—	273,472	24,820	50,236,441	41,187,691	7,093,871
1924-25	36,723,531	13,148,085	—	292,963	14,671	50,179,250	51,550,823	8,441,691
Total	146,966,803	51,725,675	1,132,674	3,187,668	120,707	203,133,528	233,827,723	—

<sup>1</sup> Contributions of service departments (Admiralty, War Office, and Air Ministry).

<sup>2</sup> Debit.

These figures show clearly the effect of suddenly covering into the scheme, at a time of extreme industrial depression, millions of workers who had not made any preliminary payments toward the benefits provided. At the end of 1920 the unemployment insurance fund had such a large surplus that it was possible to pay before July, 1921, not far from £22,000,000 in benefits over and above payments received and yet have a balance of £99,798. From that time the fund has never had a surplus, its most prosperous time being the period 1923-24, when its debt sank to a little over £7,000,000.

## HOUSING

### Tax Exemption for Housing Corporations in New York City<sup>1</sup>

EARLY in June, 1927, the New York municipal assembly passed an ordinance exempting from local taxes for a period of 20 years all model tenements which limited-dividend corporations may build, either on land now occupied or formerly occupied by old-law tenements or undesirable buildings. Under the State law, passed in May, 1926, such corporations are exempted from the payment of any and all franchise, organization, income, mortgage recording, and other taxes to the State and its officers, and their bonds and mortgages, with the interest thereon and their dividends, are also freed from State taxation. The State could not remit local taxes on buildings and improvements, but it authorized municipalities to do so, and provided that whenever a municipality took advantage of this permission, the buildings and improvements should be to the same extent freed from State taxes.

Public limited-dividend housing corporations are required to furnish, through the actual sale of stock for cash, one-third of the capital required for any project undertaken, the remainder being secured through bonds bearing 5 per cent on first mortgage and 5½ per cent on debenture bonds. All projects must be approved by the housing board, and rent must not exceed \$12.50 per room per month in New York proper, the bathroom not being counted as a room. Dividends are limited to 6 per cent. Should returns reach a figure which, allowing for cost of maintenance, depreciation, and the like, would justify a higher return, rents are to be lowered proportionately.

It is definitely expected that this action will lead to the substitution of new and improved housing for the old-law tenements which have been one of the dark spots in New York's housing problem. A survey of the most congested parts of the city, made in the latter part of 1926, showed some 950 assessment blocks suitable for housing of the kind contemplated, on which, allowing for all costs of condemnation proceedings, compensation, etc., it would be possible to build model tenements of the kind desired to rent within the limits set.<sup>2</sup>

The housing board, whose approval must be secured before any building may be erected, has decided upon various types of housing which it will sanction. All require the three forms of economy which the large semiphilanthropic corporations have found practicable—cheap land, cheap capital, and efficient large-scale construction. The land in the blocks covered by the survey referred to ranged from \$6 to \$14 a square foot, the rates which may be paid for capital are strictly limited, and examples of efficient large-scale construction are not wanting. It is intended that not more than 50 per cent of the land shall be occupied by the building, leaving a large amount for court and playground space, air, and light. According to the New York Record and Guide (June 11, p. 5), it is estimated that \$25,000,000 is needed to make a satisfactory beginning of the movement, and it is hoped that this will be raised without delay.

<sup>1</sup> New York Times, June 12, 1927.

<sup>2</sup> See Labor Review, March, 1927, p. 178.

# HOUSING

## COOPERATION

### Cooperative Provision of Credit to the Needy Worker

THE need for the provision of avenues of credit for the worker who needs a loan and the present credit system in the United States are discussed in an article in the May, 1927, issue of the International Labor Review.<sup>1</sup>

It is estimated that only from 7 to 15 per cent of the population have bank credit, leaving the great majority of people without normal bank-credit facilities. For the average small borrower there are three sources of credit: (1) Remedial-loan associations, (2) private agencies operating either under public regulation or in more or less open defiance of all regulation, and (3) cooperative credit societies.

#### Remedial Loan Associations

SOME 30 remedial-loan associations have been formed in the United States. These are semiphilanthropic institutions financed by private capital, which is advanced by persons actuated by "a desire to supply funds for necessitous borrowers at legitimate rates."

These, it is stated, were established as a stabilizing force "to provide such competition as would result in the improvement of the methods commonly employed by money lenders, and to afford an object lesson that would attract reputable capital to the business."

#### Private Agencies

USURY is described as a result of the combination of a need of credit, generally acute, and a breakdown of credit facilities at normal rates of interest. The borrower is usually in immediate need of money, is often timid, ignorant, and anxious for privacy. Under such circumstances he is likely to accept whatever terms he is offered at the first place at which he applies. The "freebooter" money lender is therefore at liberty to charge what he will, and investigations have shown that in some cases the rates actually charged under such conditions range from 260 to 3,600 per cent.

The writer points out in this connection the error of the popular tendency to consider all rates in excess of the traditional 6 per cent as usurious. If the loan costs the lender 8 per cent to make and he charges the borrower 14 per cent, "realizing a net 6 per cent profit, obviously the transaction is not usurious. Usury is the practice of charging a rate of interest which—all of the circumstances of the given case taken into careful consideration—is inequitable."

<sup>1</sup> International Labor Review (Geneva), May, 1927, pp. 709-740: "Credit cooperation as adapted to the needs of the worker," by Roy F. Bergengren.

The money lender fills an economic need, for he sells credit to a buyer who needs credit and can not get it elsewhere. It is because of this fact that antiusury legislation which does not take into account the need of the borrower for a source of credit inevitably fails.

Usury can be eliminated only by creating at the same time a source of credit at legitimate rates of interest. This has been the aim of what is known as the "uniform small-loan" legislation in various States. Such legislation provides for an interest rate of  $3\frac{1}{2}$  per cent a month on loans of \$300 or less, or 42 per cent per year. This rate is justified on the ground (1) that the risk in these loans is greater than those usually handled by ordinary banks, the term of the loan is longer, and the security offered usually not of the sort acceptable to the bank; (2) that operating expenses are high because the amount loaned is small and must be collected in monthly installments; and (3) that the lending capacity of a small-loan agency is limited to its cash capital on which it must pay dividends. The law provides for supervision of the lending agencies and reports therefrom; it eliminates service charges and makes the rates computable on the balances. The money-lending business is placed by it on a respectable basis.

The successful operation of the small-loan laws is pointed to as an indication of "the soundness of the contention that there can be no successful small-loan legislation which fails to take into account the need of the borrower for credit, and which also fails to recognize the fact that the borrower, of the description we have in mind, is not a free agent who can be left to the protection of the law of supply and demand."

#### Cooperative Credit

SINCE experience seems to have proved that  $3\frac{1}{2}$  per cent a month is the lowest rate which will attract private capital for lending purposes, if the wageworker is to have available for his use credit resources at a lower rate than 42 per cent he must look to another source than to the private loan agencies. This can be found in the cooperative credit society, whose underlying principle is "the accumulation of the savings of a group of people, the investment of the accumulation in loans at legitimate rates of interest to members of the group, and the management of the resulting business by officers chosen by and from the members of the group in meetings in which each member of the group has a single vote whatever his holding in shares and deposits may be. No one outside the group has anything at all to do with it directly or indirectly."

Each member subscribes for at least a single share of capital stock, paying for it in cash or weekly installments of as little as 25 cents a week. Under the latter plan each member is encouraged to save what he can, acquiring in the process the habit of regular saving. "By the time the member has his first share paid for he has acquired this habit and goes right on subscribing for more shares." Thus the funds of the group are built up and little by little each member accumulates savings.

The funds thus accumulated are used for loans to members of the group, repayable in installments spread out over the period of a year. Thus in the credit union the member turns for credit to his fellow worker. "He unites with his own associates; they pool their savings;

they use the resulting accumulation solely for the benefit of those to whom it belongs, namely, for the benefit of the savers."

There is no invested capital on which a preferred dividend must be paid; there is no incentive to usury, as the funds invested are the joint funds of the members, most of whom at some time or other must turn to the funds for credit. There is no large overhead expense; there is the capacity for correct credit diagnosis. The result of it all is that loans are made at normal rates of interest.

The credit union is a sane, business-like device for creating credit—not for every applicant, but for every applicant eligible to and worthy of credit; not for all purposes, but for the purposes which hold forth a real probability of ultimate value to the borrower. Credit unions succeed when the plan is properly applied; by the same token, they fail when improperly managed. Success is in every case the result of hard work. In the credit union most of this work is done unselfishly. It is necessary to find some substitute for the compelling motive which brings as a reward to the private lender a high return on his money. The successful credit unionist must be touched with the passion for service; he must realize that his organization has in it something of the principle of the brotherhood of man—that it is a cooperative organization built on a foundation of the strength of unity for a common purpose; as the credit union grows in size and assets, those who do the bulk of the work will be paid something and adequately; but whether the credit union be large or small, they must have at least a glimmering sense of that intangible something which may make a human being conscious of his capacity, large though it be or small, to perform unselfish service. Such sense is rare, though not so rare as popularly imagined. Coupled with that must be hard-headed business acumen, good sense, an understanding of credit, and the will to make the business succeed as a business. Cooperation is not a miracle; it is a plan of human association in business for the joint and several good of those who are so associated, and there can be no good result from the operations of any cooperative society—whether it deal in credit or in any other commodity—unless the business is a success as a business. There is little sense in a plan of profit division if there be no profits to divide.

The author refers to the fact that credit union legislation has been only a recent development, so that "of necessity, the development (of credit unions) in most States is thus far of a pioneering nature" and has "purposely followed the laboratory or experimental method." In this experimental way the credit union plan has been inaugurated among various groups—postal employees, railway employees, school-teachers, etc.

Credit unions supply valuable business training to their officers. They are almost exclusively managed by wage workers. The author cites the fact that the 20 directors of the Massachusetts Credit Union League, each of whom is the manager of a credit union, together manage a business totaling \$8,000,000 a year. "No one of them ever managed anything more important than his individual pay envelope prior to the organization of his credit union, and the credit union business they manage is subject to the supercritical examination of the Massachusetts State Department of Banking, a scrutiny to which many private businesses could not successfully be submitted."

It is pointed out that "credit unions are the only type of banking institutions which have had no involuntary liquidations during the very difficult war and post-war periods."

Unlike ordinary banks, the credit union does not require that the member have accumulated an account equal to or in excess of the loan required. A man who is a member of the group from which the credit union membership is recruited but not a member of the credit union may find himself in great and immediate need. His case will not be rejected because he is not a member, but he must become a member, and subscribe for a share of stock, paying an initial in-

stallment on it and an entrance fee—at a total initial cost of 50 cents. Having done that, he may apply for credit and his application will be considered just as if his holdings in the society were considerable. The terms on which the loan is granted may, however, take into consideration his small holdings. The term of the loan may be shorter, an indorsement of another member may be required, or he may be required to subscribe for additional shares of stock. "All the circumstances will be taken into account, but if there is any way in which the applicant can be assisted, consistent with the safe investment of the funds of the credit union, such credit assistance will be afforded him."

Credit committees become very expert in judging the borrower's good faith. This committee must be satisfied of his intentions faithfully to meet his obligations before it will grant a loan. The excellence of the committee's judgment in this regard is attested by the small losses of credit unions.

The author feels that the credit problem in the United States is that of the "quantity production of credit unions, and cooperative credit should work as well elsewhere to assist the worker to solve his credit problem when the principle is properly applied."

## LABOR LAWS AND COURT DECISIONS

### Civil Rights of Former Convicts

A RATHER novel defense was set up in a case which recently came before the Supreme Court of Nebraska on appeal. (*Bosteder v. Duling et al.*, 213 N. W. 809.) John Bosteder was employed by the defendants to feed cornstalks into an ensilage cutting machine, and while so doing his hand and arm were caught in the rollers of the machine and injured. In an action for damages brought in the district court of Lancaster County it was established by the admissions of the defendants in their pleadings and by the evidence adduced at the trial that the ensilage cutter was worn, out of repair, unfit for use, and dangerous to the one feeding it, and that these facts were known to the defendants but were unknown to Bosteder. At the close of the plaintiff's evidence the defendants moved for a dismissal of the case for the following reasons:

- (1) Because the record shows that the plaintiff has been convicted of a felony, has lost his civil rights, and has no rights to maintain an action in the courts of Nebraska; (2) because the evidence is not sufficient to sustain a verdict in favor of the plaintiff and against this defendant; (3) because the plaintiff has not sustained any of the allegations of his petition against this defendant.

The trial court sustained the motion and dismissed the case; hence the appeal.

The Supreme Court found that none of the positions taken by the defendants' motion should have been sustained, and therefore the trial court had committed a reversible error.

For the purpose of this article only the first position will be dealt with. By the provisions of the constitution of Nebraska a person convicted of felony is deprived of the right to hold office, to vote, to serve as a juror, or to hold any office of honor, trust, or profit within the State. In the course of the opinion Judge Thomas, speaking for the court, said:

Considering the above constitutional provision and such sections of the statute, together with section 15, article 1, of the constitution, which provides that "no conviction shall work corruption of blood or forfeiture of estate," none thereof deprive such convicted person of other or different rights than those specifically named therein respectively. Thus, "corruption of blood" and "forfeiture of estate," as imposed by the common law on persons attainted of felony, are unknown to the laws of this State, and no consequences follow conviction and sentence by reason thereof, save and except such as are declared by constitution or statute. \* \* \*

As no conviction shall work "corruption of blood or forfeiture of estate," certainly none of such sections cited deprives this plaintiff, by reason of his conviction of a felony, of his civil right to his property and earnings, as existed prior to such conviction, and neither do they deny to him due process to our courts to protect his property or earnings. Civil death, as known to the common law, is without place in our jurisprudence. (*Bosteder v. Duling et al.*, 213 N. W. 809.)

The judgment of the trial court was therefore reversed and the cause remanded for further proceedings.

### Protective Legislation for Native Workers in Argentina<sup>1</sup>

THE Argentine Ministry of the Interior issued a decree on January 13, 1927, for the purpose of protecting the Indians settled in the native reserves. It is explained that natives who work individually or in groups in the northern territories must be protected against abuses by individuals and by undertakings.

An Indian reserves committee shall fix wages, in cash or in kind, to be paid to the natives and shall determine the expenditure to be incurred. It shall authorize the purchase of stock, implements, foodstuffs, clothing, and other necessities for the Indians. To encourage the settlement of natives in the reserves the committee, shall offer them work with pay and shall supply them with necessary food and clothing. The decree provides that the committee shall endeavor to educate and to teach them the value of thrift. The construction of buildings and any other improvements in the reserve shall be authorized by the committee.

Since the Indians are more efficient in agricultural than in industrial pursuits, the committee is empowered to supply them with necessary agricultural implements and with seed during the farming season. Native schools are to be established and pupils attending such schools are to be supplied with free food and clothing.

The sale of alcoholic beverages is forbidden in the reserves and those violating this provision are to be reported to the Ministry of the Interior.

All labor agreements concluded by the natives are to be supervised by the committee which may refuse to authorize the engagement of native workers by enterprises which do not comply with the requirements of the law.

Firms which desire to engage natives for employment away from their place of residence must first obtain the authorization of the committee.

A system of inspection of the working conditions of native labor is to be inaugurated, the cost of which is to be paid by the industrial establishments concerned.

### Protective Legislation for Working Women in Chile<sup>2</sup>

CHILEAN legislative decree (No. 442) in effect throughout that Republic since June, 1925, contains provisions governing the employment of working mothers in industrial and commercial enterprises. The law applies to all factories, workshops, and industrial or commercial establishments, whether public or private, if 20 or more women are employed therein.

Women employees must be granted leave for a period of 40 days before childbirth and 20 days thereafter at one-half of their regular wage; if employed on a piece-rate basis they shall be paid one-half of their average earnings during the preceding month.

<sup>1</sup> La Nación, Buenos Aires, Jan. 15, 1927; and International Labor Office. Industrial and Labor Information, Geneva, Mar. 7, 1927.

<sup>2</sup> Chile. Boletín de la Dirección General del Trabajo, año 1925, no. 23: Las Leyes del Trabajo y de Previsión Social de Chile, pp. 288-298.

Employers may not dismiss a woman employee without reasonable cause, and a reduction in the output of a prospective mother shall not be deemed a reasonable cause.

Enterprises covered by this law must maintain rooms adjacent to the workplaces where the woman employees may nurse their children and leave them while they are at work. These rooms shall be so situated as to admit plenty of air and sunshine, and shall be equipped with at least three chairs and three cots for every 20 woman workers employed. Every establishment shall have as many rooms as are necessary to accommodate the children of the woman workers and in no case shall more than 25 children be accommodated in 1 room. The nurseries are to be under the care of a competent person who shall be responsible for the care of the children. A notice shall be posted at the door of the nursery informing the woman workers that they have the right to take their children to this room.

The mothers shall be entitled to two rest periods a day of half an hour each for the purpose of nursing their children. Deductions shall not be made from the mothers' wages on account of these rest periods.

The text of this law shall be posted in the workrooms of factories employing women and a copy thereof shall be given to each woman employee.

Violations of any of the provisions of this decree are to be punished by a fine of not less than 100 nor more than 500 pesos.<sup>3</sup> The amounts thus collected shall constitute a fund for the purpose of assisting working mothers, to be expended in a manner prescribed by the President of the Republic. In case of a repetition of the offense, a fine of not less than 500 nor more than 1,000 pesos shall be imposed and the establishment may be closed.

Employees of the General Labor Office have the right to inspect factories, workshops, and commercial establishments which employ women, and to report any irregularities which they may observe in the carrying out of these regulations. The General Labor Office may require any improvements in the equipment and services of the crèches which appear necessary as a result of the inspection.

### Progress of the English Trade-Union Bill

**T**HE bill for regulating trade-unions, the terms of which were given in the Labor Review for May, 1927, passed its third reading in the House of Commons on June 23, and went to the House of Lords. In its passage through the Commons several amendments were made, mostly in the hope of lessening the ambiguity of the original terms. The first section had, among other conditions which made a strike illegal, included the intention to "intimidate the community or any substantial portion of the community." This has been amended so that the first part of the section now reads:

It is hereby declared that any strike is illegal if it has any object other than or in addition to the furtherance of a trade dispute within the trade or industry in which the strikers are engaged, and is a strike designed or calculated to coerce the Government either directly or by inflicting hardship upon the community.

\* Exchange rate of peso in 1926—12.08 cents.

A new subsection was inserted covering lockouts, which were not mentioned in the bill as at first introduced, and applying to them the same provisions as to strikes.

Under the original terms of the bill everyone who took part in a strike which was declared illegal might be held guilty of violating the law and punished by fine or imprisonment. This section has been amended to read:

If any person declares, instigates, incites others to take part or otherwise acts in furtherance of a strike or lockout declared by the act to be illegal, he shall be liable on summary conviction to a fine not exceeding £10 or to imprisonment for a term not exceeding three months or on conviction on indictment to imprisonment for a term not exceeding two years: *Provided*, That no person shall be deemed to have committed an offense under this section or at common law by reason only of his having ceased work or refused to continue to work or to accept employment.

One criticism repeatedly brought against the bill was that it contained no definition of the phrase "trade or industry in which the strikers are engaged," thus leaving it altogether uncertain what workers might strike in support of others. As an aid toward such a definition, a new subsection was introduced as follows:

Without prejudice to the generality of the expression "trade or industry," workmen shall be deemed to be within the same trade or industry if their wages or conditions of employment are determined in accordance with the conclusions of the same joint industrial council, conciliation board, or other similar body, or in accordance with agreements made with the same employer or group of employers.

#### Congress Conciliation Court

#### Restitution with Privilege

and other educational organizations have now made a definite contribution to the development and use of the educational facilities of our country. In addition, a number of new organizations have been formed.

## WORKERS' EDUCATION AND TRAINING

### Fifth National Convention of Workers' Education Bureau<sup>1</sup>

THE Workers' Education Bureau held its biennial convention in Boston, April 22-24, 1927. The activities of the bureau for the preceding two years were reported upon by the executive council of the organization. Among such activities were encouraging beginnings in research in connection with the bureau's publications and the educational procedure for workers' education classes.

#### Cooperative Educational Committees

UNDER the auspices of the Workers' Education Bureau, educational courses for workers have been instituted in practically all of the States.

The central labor unions have appointed 270 local education committees which cooperate with the American Federation of Labor committee on education and the Workers' Education Bureau. Educational programs have been inaugurated, including educational hours in the meetings of local unions, open forums, week-end conferences, regional conferences, labor institutes, labor chautauquas, workers' colleges, summer schools, and vacation classes. One of the most outstanding accomplishments along these lines was the recent conference on the elimination of industrial waste, conducted by the Labor College and the Central Labor Union of Philadelphia.

#### Carnegie Corporation Grant

THE delegates decided to constitute and incorporate the Workers' Education Bureau Press to conserve the Carnegie Corporation's unconditional grant of \$25,000, which will form a revolving fund for publications. Matthew Woll is the president of the new organization, and Spencer Miller, jr., the secretary and managing editor. Prior to final action on the Carnegie grant there was considerable discussion as to the policy of accepting unconditional funds from foundations.

#### Relations with Libraries

THE holding of the convention in the Boston library—one of the oldest public libraries in the country—seemed, as it were, to cement definite relations between such institutions and the workers' education bureau. The Boston public librarian made special provisions for the convention, which met in the auditorium. In one of the library rooms a workers' education exhibit was installed,

<sup>1</sup> The Federal Employee, Washington, D. C., June, 1927, p. 5, and Labor Age, New York City, June, 1927, p. 25.

including oil paintings of industrial workers by Gerrit Beneker, and workers' education literature from all countries. The president of the American Library Association spoke at the convention dinner and voiced the desire of the library to aid in workers' education.

### Per Capita Taxes

THE following organizations pay per capita taxes into a fund for carrying on the bureau's administrative work: American Federation of Labor, Bakery and Confectionery Workers, Barbers, Brewery Workers, Bricklayers, Bridge and Structural Iron Workers, Cigarmakers, Post Office Clerks, Cloth Hat, Cap, and Millinery Workers, Sleeping-Car Conductors, Coopers, Wood Carvers, Diamond Workers, Draftsmen, Technical Engineers, Architects, Electrical Workers, Steam Engineers, Photo-engravers, Metal Engravers, Federal Employees, Foundry Workers, Fur Workers, United Garment Workers, Ladies' Garment Workers, Glass Bottle Blowers, Flint Glass Workers, Hod Carriers, Building and Common Laborers, Hotel and Restaurant Employees, Iron, Steel, and Tin Workers, Wood, Wire, and Metal Lathers, Longshoremen, Machinists, Maintenance of Way Employees, Marble, Slate, and Stone Polishers, Sheet Metal Workers, United Mine Workers, Molders, Musicians, Paper Makers, Paving Cutters, Plumbers and Steam Fitters, Metal Polishers, Operative Potters, Pulp and Sulphite Workers, Quarry Workers, Railroad Signalmen, Switchmen, Tailors, Teachers, Teamsters, Textile Workers, Typographical Union, Upholsterers, and Wall Paper Crafts. In addition, membership dues are paid by 21 State federations of labor, 68 central unions, and 360 local unions.

The total union contributions for 1926 amounted to \$7,434 which was approximately 20 per cent of the total budget. Such contributions for the 11 months of the fiscal year 1927 totaled only \$4,315 or 12.5 per cent of the entire budget. The decrease is ascribed to the fact that certain unions have not paid their dues while carrying on strikes.

### Definition of Workers' Education

The following definition of the object of workers' education was given by James H. Maurer, the president of the workers' education bureau at its 1927 convention:

Underlying the purpose of workers' education is the desire for a better social order. It is this desire on the part of the workingman for a richer and fuller life individually and collectively that gave the movement its birth and at all times must remain its treasured inheritance. Labor education aims at ultimate liberation of the working masses.

The Workers' Education Bureau was not organized for the purpose of duplicating the work done by the public schools, universities, correspondence schools, and so on. It is distinctly not to be confused with the numerous existing forms for adult education. They are designed for the most part, either to give a bit of culture to the student, or else to lift him up out of his present job into a higher one. That is not the purpose of workers' education. It is education that will stimulate the student to serve the labor movement in particular and society in general, and not education to be used for selfish personal advancement.

### Manumit—An Educational Experiment for Workers' Children

**M**ANUMIT, a pioneer experimental school for workers' children, located near Pawling, N. Y. (64 miles north of New York City), is managed jointly by educators and trade unionists. The institution has accommodations for 40 or more boys and girls and is surrounded by a farm of 177 acres.

An article on Manumit, by Miss Nellis M. Seeds, is published in the May, 1927, issue of *The American Teacher*, from which the following information is taken.

The buildings of this unusual school include an old colonial farm house in which there is the school dining room and kitchen, library, social room, classrooms, and several dormitories; two faculty and student dormitories; a craft shop, carpenter shops, a gymnasium; outhouses and barns.

The school community is self-governing and its affairs are discussed with great freedom at weekly conferences. The children are encouraged to express their opinions, both favorable and critical. "The principle of one individual, one vote, governs all community meetings," except on matters of safety, health, and educational procedure. The children choose their own subjects of study and determine largely their own projects or activities.

Each child is accepted as a complete individual. He is not pumped full of any kind of propaganda, neither capitalist, socialist, nor communist. No "ism" of any kind is taught. He is encouraged and allowed to think for himself. In order to render his thinking accurate, information is presented to him as scientifically as possible, in as large doses as he is capable of absorbing and assimilating. The trade-union movement, for example, is pictured to the child as it is in few other schools; the children are made to appreciate the truly heroic struggle that labor has made to gain its rights. Other information, often withheld in our public schools, is presented to the children in the light of modern scientific interpretation.

There are six groups of children and a separate teacher for each group and each group devotes its principal attention to some special project or activity. For example, Group II (age 11 years) is interested this year in building and equipping a cottage which it is planned to occupy the next school year. The children look over magazine advertisements, write letters requesting catalogs and data on the most up-to-date heating plants, scientifically constructed refrigerators, the proper kinds of windows, flooring, and other important housing matters. The young builders must have recourse to arithmetic in arranging for the number, size, and shape of the rooms and measuring the land to be occupied. The climate must also be reckoned with in the building of their cottage and they become interested in such matters as prevailing winds, the amount of rain, snow, and frost to be expected in the winter, and the height of the summer's heat. They get their mathematics, geography and English "as part of a game."

All the school's work is done cooperatively by the community members, the inside works committee detailing squads for various household activities, such as getting meals, dishwashing, and sweeping; the outside committees, with the superintendent of the farm, plan the outside activities and decide what the children can do in connection with planting, gardening, and care of livestock, etc.

In addition to the six group teachers, there are two who have specialized in art work and music. No children are accepted in the

music department unless they come of their own accord. At the end of the fall term, only two of the children had not expressed a wish to take up music of some kind. The school orchestra includes a variety of instruments some of which were constructed by the children themselves. A few of these youthful musicians have aspired to original compositions which have been played by the orchestra of the school. Group singing has been organized, and the putting on of one of Gilbert and Sullivan's operettas was in contemplation at the time of preparation of the article under review.

The art department allows free scope to the children's ingenuity. Paints, clay, and materials for wood carving, basketry, and weaving are available and counsel and instruction are given as and when they are demanded by the children.

There is also a school printing press and this year the 13-year-old group decided on a newspaper as its project.

Social science work in this school is quite unusual. For instance, the children of Group VI were given parts in a mock trial. In talking over the results of this trial and its broad social aspects "the children learned civil government, not as an abstract question out of a book, but as a living, dynamic factor in everyday life."

These few illustrations give some indication of the methods used at this school which has on its board of directors teachers and university professors who rank high in their special fields.

The tuition rates of the school are reported as being "within the reach of any worker." So many have wished to enter their children at Manumit that numerous applications for admission have had to be refused.

In closing her article the writer declares that "to the labor movement as a whole, Manumit hopes to serve as a laboratory school. \* \* \* If they can demonstrate, in their own laboratory school, the infinite possibilities of free education, they are in a position to insist that the same principle be applied to the public schools."

## LABOR ORGANIZATIONS AND CONGRESSES

### Pan American Labor Conference

THE fifth meeting of the Pan American Federation of Labor was held in Washington July 18-23, 1927. At this meeting delegates were present representing organized labor in Colombia, Cuba, Dominican Republic, Guatemala, Mexico, Nicaragua, Panama, Peru, Porto Rico, Salvador, United States, and Venezuela. An account of the proceedings and action of this congress will appear in the September, 1927, issue of the *Labor Review*.

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### Tenth International Labor Conference<sup>1</sup>

THE tenth session of the International Labor Conference was held in Geneva from May 25 to June 16, 1927, with 145 delegates and 186 substitutes and advisers, representing 43 countries, in attendance.

The agenda of the conference contained three questions—sickness insurance, freedom of association, and minimum wage-fixing machinery—for consideration, although only the question of sickness insurance was intended to lead to the adoption of a draft convention or a recommendation, the other two questions being submitted for general discussion with a view to bringing them before a subsequent conference for further action.

The discussion of the director's report occupied a large part of the sessions of the conference and the speeches covered a wide range of subjects connected with the work of the International Labor Organization. More than 50 delegates representing the Governments, employers, or workers of about 30 countries took part in the discussion, which was described by one of the delegates as "an international forum for the free discussion of labor problems."

Draft conventions, one relating to sickness insurance for workers in industry and commerce (with the exception of seamen and sea fishermen), outworkers, and domestic servants and the other to agricultural workers, were adopted by the conference.

The conventions provide for a system of compulsory sickness insurance for these workers, to be set up by members of the International Labor Organization ratifying the conventions, and apply in general to manual and nonmanual workers within certain age limits

<sup>1</sup> International Labor Office. *Industrial and Labor Information*. Geneva, May 30, June 6, 13, and 20, 1927.

whose wages do not exceed an amount to be determined by national laws or regulations. The convention provides that such a system shall be supported by insured persons and employers and administered by self-governing institutions under the administrative and financial supervision of the public authorities. A draft recommendation covering the general principles of sickness insurance for the guidance of countries adopting such a system was passed by the conference and a resolution was also adopted which requested the International Labor Office to report upon the most effective methods of overcoming the obstacles which hinder the organization of a system of compulsory sickness insurance in countries which are sparsely populated or where geographical conditions render communication difficult.

The question of freedom of association, which was to be the subject of a questionnaire to the different countries, was referred back to the committee, as the proposed questionnaire was not satisfactory to the workers' group and it was decided by vote of the conference not to place it on the agenda of the next conference.

A draft questionnaire on minimum wage-fixing machinery was adopted and the conference voted to consider this question at the next session.

The "double-discussion" procedure, which was adopted at the 1926 conference and which provided that an item before any session of the conference should be presented to the Governments so that the final report would be ready for discussion and vote at the next session, caused so many difficulties that the conference decided to ask the governing body to examine further the application of the double-discussion procedure and to make proposals for its improvement to the next session of the conference.

Various resolutions placed before the conference were referred to the governing body or to the International Labor Office for consideration and the necessary action. These resolutions included: International regulation of the hours of work of all workers other than industrial workers (commercial employees); general principles of contracts of employment; the solution of collective labor disputes; invalidity, old-age, widows' and orphans' insurance; education and entry into employment; and native labor problems. A resolution relating to representation for native workers in the conference, particularly when questions affecting their conditions are on the agenda of the conference, was referred to the governing body for consideration.

The report of a committee which had examined the annual reports presented by the different States on the application of conventions ratified by them was accepted by the conference. The committee made certain suggestions as to the contents and the date at which the reports should be forwarded, and concluded as a result of its study that although complete satisfaction with regard to the application of conventions could not be recorded, valuable results had been achieved in the direction of a better regulated social order and the effective protection of labor.

### Labor Program of General Federation of Spanish Workers<sup>1</sup>

**O**N MAY 1, 1927, the General Federation of Spanish Workers submitted to the Government a statement of its program, the more important items of which are the following: Rigid enforcement of workers' insurance legislation and the adoption of insurance covering unemployment, maternity, and invalidity; strict observance of social legislation, particularly of the eight-hour day; and the adoption of effective methods to deal with the high cost of living and the unemployment situation.

In its demands for agrarian legislation, the federation advocates the extension of benefits under the industrial accident law and other social legislation to agricultural workers and the establishment of an agricultural bank. It also favors the formation of joint organizations for fixing minimum wages. In addition the federation endorses the introduction of legislation providing for trade-union control in industry.

<sup>1</sup> La Vanguardia, Barcelona, May 3, 1927; and International Labor Office, Industrial and Labor Information, Geneva, May 30, 1927.

## **INDUSTRIAL DISPUTES**

## **Strikes and Lockouts in the United States, June, 1927**

**S**TRIKES and lockouts in the United States beginning in the month of June, 1927, in so far as reports thereof have been received by the bureau are shown in this article. Disputes involving fewer than six workers and those lasting less than one day have been omitted where information on this point is reported.

In presenting these figures, it is important to note that the bureau has no machinery for the prompt and full reporting of strikes and lockouts, but depends largely upon newspapers, trade journals, and labor periodicals for the preliminary reports of disputes. These preliminary reports are then followed up by correspondence, and any necessary revision is made. For the reasons mentioned the data here presented do not pretend to be absolutely complete or fully accurate. It is believed, however, that practically all of the more significant strikes and lockouts are recorded, and that the information presented is sufficiently accurate to give a fair picture of the situation in the United States in the matter of strikes and lockouts.

The Bureau of Labor Statistics solicits the cooperation of employers, labor organizations, and other interested parties in making this compilation of industrial disputes as comprehensive and as accurate as possible.

## **Strikes and Lockouts Beginning in June, 1927**

THE table following shows the number of strikes and lockouts beginning in June, 1927, in comparison with April and May, and also the number of persons involved, to the extent that reports on this point have been received:

**STRIKES AND LOCKOUTS BEGINNING IN APRIL, MAY, AND JUNE, 1927**

Months	Number of strikes and lockouts <sup>1</sup>	Disputes in which number of employees directly involved is known <sup>1</sup>		
		Number of strikes and lockouts	Number of employees involved	Average number of employees per dispute
April, 1927	93	61	222,903	3,664
May, 1927	114	93	20,621	278
June, 1927 <sup>2</sup>	67	52	13,917	310

<sup>1</sup> Excluding those involving fewer than six persons.

<sup>3</sup> Data given are subject to revision.

**Classification of Strikes and Lockouts by Industries and by Number of Persons Involved**

THE statement below shows the distribution of the reported strikes and lockouts beginning in June, 1927, by industries or occupations:

	Number of disputes
Building trades	17
Bakers	1
Oil and chemical workers	2
Barbers	5
Clothing industry	9
Theater and motion-picture employees	2
Printing and publishing	5
Mining, coal	3
Automobile workers	1
Laundry workers	1
Textile industry	11
Hotel and restaurant workers	2
Miscellaneous	8
Total	67

As far as the information is available, the disputes beginning in June, 1927, classified by number of workers directly involved, are as follows:

	Number of disputes
6 and under 20 workers	12
20 and under 100 workers	20
100 and under 500 workers	11
500 and under 1,000 workers	5
1,000 and under 5,000 workers	4
Total	52

**Principal Strikes and Lockouts Beginning in June, 1927**

**BARBERS, New York.**—About 1,300 union barbers in upper Broadway and the Washington Heights section of New York City began a strike on June 15 for a wage of \$35 per week and half of the receipts in excess of \$50 per chair per week, instead of \$30 per week and half of the receipts over \$45. This strike, it is understood, is still in progress.

**Bricklayers, Pennsylvania.**—About 1,600 union bricklayers in Pittsburgh were on strike from June 1 to June 11 for a wage of \$1.70 an hour and a working week of 5 days, in lieu of \$1.62 an hour and a 5½-day week. The strike was compromised with the Building Trades Association on the basis of a wage increase of 60 cents per day, without change in the 5½-day week; but a number of independent contractors agreed to all demands.

**Carpenters, Rhode Island.**—Approximately 1,200 carpenters in Providence and vicinity, including Pawtucket, Central Falls, etc., began a strike on June 1 for a wage increase from \$1.10 an hour to \$1.25 an hour, causing more or less serious retardation to building operations in that territory. A partial settlement of this strike was effected on the night of July 22, when a compromise rate of \$1.17½ an hour was agreed upon. Some of the men, it is under-

stood, resumed work on July 25, but it will take a little time to arrange for a general resumption of building. While this practically settles the strike in Providence, it does not affect the situation in Pawtucket, as the Master Builders' Association of Pawtucket and vicinity was not a party to the negotiations leading up to this settlement.

*Laborers and hod carriers, Rhode Island.*—Some 2,000 laborers and hod carriers in Providence, Pawtucket and Central Falls struck on June 1 for a wage increase from 65 cents an hour to 75 cents an hour. This strike is still pending.

*Barbers, New Jersey.*—A partially successful strike of about 700 barbers in Newark was in effect from June 20 to July 1. They wanted a weekly wage of \$35 and half the income in excess of \$45 weekly per chair. They secured \$35 per week and half the receipts exceeding \$50 per chair.

#### Principal Strikes and Lockouts Continuing into June, 1927

*BITUMINOUS coal strike.*—The suspension of organized coal miners continues. A development worthy of mention was the failure on June 24 of a series of conferences at Philadelphia between union operators and miners to reach a new wage agreement for the central Pennsylvania field, followed by the announcement that all work in the union bituminous mines of that field would cease at midnight on Thursday June 30. The number of men directly involved in this strike or suspension is about 15,000. Operations had been continued in this field after the expiration of the Jacksonville agreement on April 1 under a temporary arrangement "pending negotiations by and for the central Pennsylvania district looking toward a definite wage agreement," with the understanding, as stated by the operators, that the "arrangement may be terminated at any time." The operators proposed a reduction in the Jacksonville scale of 15 to 20 per cent and an average reduction of \$1.50 a day for day workers, but the miners wanted the present wage schedule continued until March 29, 1929.

In further reference to the agreement of April 20 between the strip-mine operators of Indiana and district 11, alluded to in the report for April, it may be stated that the agreement is for two years expiring March 31, 1929, provided "a contract by and between the United Mine Workers of America and the Indiana Bituminous Coal Operators' Association is made for that period."

If such contract is not made for that period, this contract is to terminate concurrently with any contract made between the Indiana Bituminous Coal Operators' Association and the United Mine Workers of America. In the event no agreement is secured by and between the United Mine Workers of America and the Indiana Bituminous Coal Operators' Association then this agreement will expire March 31, 1928.

Likewise it is agreed that the wage scale "shall automatically increase or decrease at the same rate of increase or decrease with the top and underground day labor as set out in any agreement that may be reached by and between the Indiana Bituminous Coal Operators' Association and the United Mine Workers of America in any contract written to supersede their contract expiring March 31, 1927."

*Plumbers, New York.*—The general lockout of April 27 against plumbers and helpers in Greater New York continues only with respect to the Boroughs of Queens and Richmond, settlements of the struggle in the other boroughs having been shown in previous reports.

## **Conciliation Work of the Department of Labor in June, 1927**

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the conciliation service, exercised his good offices in connection with 52 labor disputes during June, 1927. These disputes affected a known total of 16,613 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly affected.

On July 1, 1927, there were 50 strikes before the department for settlement, and, in addition 12 controversies which had not reached the strike stage. The total number of cases pending was 62.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, JUNE, 1927

CONCILIATION WORK OF THE DEPARTMENT

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Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement				Men involved
				Begin-ning	Ending	Di-rectly	Indi-rectly	
Baptist Tabernacle, Inc., Indianapolis, Ind.	Controversy	Glaziers and helpers	10 per cent wage cut.....	Adjusted. Few discharged; others returned on company's terms.	1927 May 9	June 2	50	100
Boilston System Filter Co., Boston, Mass.	Controversy	Carders.....	Increased number of machines.	Adjusted. Accepted work of three machines; company's terms.	May 23	do....	35	75
Borg-Warner Corp., Chicago, Ill.	Strike.....	Machine operators.....	Discharge of operator.....	Pending.....	(1)	do....	60	100
Barnett Leather Co., Little Falls, N. Y.	Strike.....	Bricklayers and masons.....	Asked \$12 per day.....	Adjusted. Allowed \$11.60 per day by arbitrator.	May 5	June 21	120	150
Phoenix Mill, Little Falls, N. Y. ....	Controversy	Lithographers.....	Asked decrease of hours from 48 to 44.	Pending.....	Apr. 1	do....	81	81
Picture and vaudeville theaters, Kokomo, Ind.	Strike.....	Carpenters.....	Asked 75 cents per hour.....	do....	June 1	do....	1,165	(1)
Bricklayers and masons, Portland, Ore.	do.....	Electricians.....	Asked \$1.25 per hour; 8-hour day.	do....	do....	do....	do....	do....
Lithographers, Chicago, Ill. ....	do.....	Flint-glass blowers.....	Asked \$1 per hour; recognition.	Adjusted. Allowed 85 cents per hour and recognition of union.	May 17	June 12	35	35
Building laborers, Providence, R. I.	do.....	Flint-glass blowers.....	Asked wage increase.....	Adjusted. Returned without increase	May 18	May 25	12	40
Carpenters, Providence, R. I. ....	do.....	Ladies' garment workers, silk hosiery workers.....	Asked wage increase; 42-hour week.	Adjusted. Pieceswork and 42-hour week.	do....	June 1	27	27
Electricians, Concord, N. H. ....	do.....	Silk hosiery workers.....	Wage cut.....	Adjusted. Wages before cut restored.	May 26	June 13	12	230
Electric Products Co., Los Angeles, Calif.	do.....	Loom fixers.....	Union dispute.....	Adjusted. Loom fixer to join union and pay back dues.	May 20	June 20	12	300
Dorothy Manufacturing Co., New York City	do.....	Laundry workers.....	Renewal of agreement.....	Pending. Strike deferred for a time.	June 3	do....	2,500	do....
Cambria Silk Hosiery Co., Philadelphia, Pa.	do.....	Bricklayers and plasterers.....	Jurisdiction of artificial stone work.	Adjusted. Plasterers waived rights in favor of bricklayers.	May 6	June 3	35	200
A. E. Margerison & Co., Philadelphia, Pa.	do.....	Steam-shovel man.....	Discharged for alleged intoxication.	Pending. Shovel man to be given hearing.	June 2	do....	1	14
Hand laundries, New York City....	Threatened strike.	Laundry workers.....	Asked wage increase.....	Pending. Unable to adjust.	June 3	do....	100	do....
Padison Construction Co., Cedar Rapids, Iowa.	Controversy.....	Laundry workers.....	Jurisdiction of metal work.	Carpenters completed job.	Jan. 1	June 1	20	do....
Sharp & Fellows Co., Nevins, Ariz.	do.....	Leathers and car-	Laundry workers and carpenters.	Unable to adjust. Adhered to award of National Board of Awards.	do....	do....	do....	do....
Laundries, Tacoma, Wash.	Strike.....	Metal workers.....	Metal workers.....	Adjusted. Increased from \$12 to \$20 per week; additional help for telephone.	June 4	June 11	6	16
E. M. Phipps & Co., Gary, Ind. ....	Controversy	Theater operators.....	Handling telephone.....	Adjusted. Returned without change.	May 17	June 17	6	6
Sheet-metal workers and carpenters, Gary, Ind.	do.....	Cap makers.....	Alleged violation of union rules.	do....	do....	do....	do....	do....

\* Not reported.

## LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, JUNE, 1927—Continued

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved
					Begin-ning	End-ing	
Opera House, Hippodrome and Duchess theaters, Warren, Ohio.	Strike.	Operators.	Operating vitaphone.	Pending. Owners now operating; musicians out in sympathy.	1927 (1)	1927	3 • 5
Skrloff, Elliston & Elsmann (Inc.), New York City.	Threatened strike.	Garment workers.	Discharge of presser.	Unclassified. No stoppage of work; presser not reemployed.	Apr. 8	June 10	1 16
M. Schaner & Co., New York City.	Strike.	White-goods workers.	Asked union recognition and 42-hour week.	Unclassified. No concessions; strikers employed elsewhere.	Mar. 15	June 11	10
Waiters, New York City.	do	Waiters.	Renewal of agreements.	Adjusted. Satisfactory agreement concluded.	May 9	June 3	1,500
Miners, Plymouth, Pa.	Controversy.	Miners.	Small dispute over boy.	Unclassified. Settled before arrival of commissioner.	June 15	June 16	1
Conrad Construction Co., New Castle, Pa.	Strike.	Carpenters and lathers.	Jurisdiction of sheet metal.	Adjusted. One carpenter to work with each lather.	June 22	June 23	20 79
Dunn Mill, Woonsocket, R. I.	Threatened strike.	Textile workers.	Alleged violation of agreement by company.	Pending.	(1)		(1)
Plumbers, Dover, Rockaway, and Lake Hopatcong, N. J.	Strike.	Plumbers.	Asked \$1 increase; \$11 per day.	Adjusted. Allowed \$1 per day and 1-year contract.	May 16	June 17	56 6
Ladies' coat makers, New York City.	do	Coat makers.	Asked recognition and agreement.	Unclassified. Agreement signed before arrival of commissioner.	May 9	June 14	27
Albert School Building, New Castle, Pa.	do	Building trades.	Refusal to employ union men.	Adjusted. Union men employed; contract for one year.	June 16	July 8	20 15
Warwick Mills, Centerville, R. I.	do	Textile workers.	Working conditions.	Pending. Mill closed.	June 17	---	230
Exchange Bakery and Restaurant, New York City.	do	Waiters.	Nonunion waiters employed.	Pending. Attempt to organize waiters.	Apr. 1	---	4 16
Columbus Lithograph Co., Columbus, Ohio.	do	Lithographers.	Asked 44-hour week.	Pending. No progress toward adjustment.	June 17	---	25
Barber shops, New York City.	do	Barbers.	Asked increase to \$35 and commission on all over \$50 per chair.	Pending.	June 15	---	1,300 500
Krebs Pigment & Chemical Co., Wilmington, Del.	do	Employees.	Asked 15 cents per hour increase; 70 cents per hour.	Unclassified. Strike called off; returned at same wage.	June 8	June 15	28 200
Fred Juncloon Co., Indianapolis, Ind.	Threatened strike.	Electrical workers.	Nonunion fixture hangers.	Adjusted. Union hangers employed.	June 2	June 6	40 110
Barrington Steam Brick Co., Barrington and Providence, R. I.	do	Brick workers.	Asked 5 per cent increase.	Unclassified. Five per cent increase allowed; men returned before arrival of commissioner.	Apr. 22	June 1	50 44
Ford Motor Co., Tacoma, Wash.	do	Mechanics.	Change from 85 cents per hour to 40 per cent on dollar for labor.	Pending.	(1)	---	(1)
Klotz Throwing Co., Simpson, Pa.	do	Silk throwers.	Claimed discrimination in division of work.	Adjusted. Work to be distributed without reference to union membership.	June 31	June 24	450 4

## CONCILIATION WORK OF THE DEPARTMENT

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		(1)	(2)	(3)	
Boston Store & Foundry Co., Reading, Mass.	Molders	Pending	Mar. 15	100	
Schwab & Baer (Inc.), New York City	Cigar makers	Working conditions	Apr. 1	June 22	
Londale Shirt Co. (Inc.), New York City	Shirt makers	do	May 9	do	
Poultry dressers, Petaluma, Calif.	Poultry workers	Unclassified. Factory closed.	June 21	June 22	25
Lehigh Valley Coal Co., Duryea, Pa.	Miners	Pending. Compromise plan held in abeyance. Adjusted. To be adjusted by district board.	June 29	July 7	100
Bricklayers, New Castle, Pa.	Bricklayers	Asked \$1 per day increase. Adjusted. Agreed to abide by rules.	do	July 1	1
Conover & Coates Co., Erie, Pa.	Plumbers and steamfitters.	Union recognition and elimination of female pickers. Working conditions	Adjusted. Agreed on jurisdiction of installing heating plant. Pending	June 28	July 8
Ryan Heating and Plumbers Contractors, Iowa City, Iowa.	Asbestos workers	Jurisdiction of labor.	June 1	do	
Drivers, yardmen, and helpers, Newark, N. J.	Drivers, yardmen, helpers.	Asked \$3 increase per week.	Adjusted. Jurisdiction to be determined in conference.	July 24	July 11
Electrical workers, Pittsburgh, Pa.	Electricians	Jurisdiction of push-button work.	Adjusted. Company offered 20 cents more per cut; accepted.	June 15	June 20
Weetamoe Mill, Fall River, Mass.	Textile workers	Dispute on price of new style.	Adjusted. Arbitrator chosen to interpret written agreement.	June 20	June 28
National Topcoat Co., Boston, Mass.	Clothing workers	Violation of trade agreement.	Adjusted. Accepted new interpretation of agreement.	do	June 25
Falkson Clothing Co., Boston, Mass.	do	do	do	do	31
Total ...				9,585	7,028

<sup>i</sup> Not reported.

## WELFARE AND RECREATION

### Welfare Work in Company Towns

THE more or less isolated community in which often only one industry is the means of livelihood of the people residing there is found in many localities in the United States. Mining enterprises naturally are frequently located in remote and inaccessible sections, while the location in small towns of one mill only or a group of mills under the same management has been a peculiar development of the textile industry in the South. In other sections, industries are often situated at some distance from manufacturing centers because of available water power, nearness to the source of raw material, or for some other reason which offsets the disadvantages connected with the distance from markets. Whatever the reason for their isolation, such towns have been forced to become more or less self-sufficing units and in order to attract a desirable class of labor or even to maintain an ordinarily self-respecting community the employers in such towns have found it desirable to furnish many of the advantages the provision of which properly comes within the province of the State, the community as distinct from the company, or other business or social agencies.

While hardly anyone will dispute the fact that the provision of churches, schools, a proper milk supply, town sanitation, and other features of communal life does not properly come within the scope of the employer's duties, or even that it is not desirable that he should provide them, the fact remains that many of these towns have been so developed and that frequently an amazing number of activities are assisted or controlled by the company.

While no survey of company towns as such was made by the Bureau of Labor Statistics, the material collected in connection with a recent study of employers' personnel activities included information regarding the life in such towns which, it is thought, may be of some value in contributing to an understanding of the various problems which have been presented in the development of these villages. The present study was not in any sense a critical one but was made for the purpose of showing what has been done along the line of personnel work and, in so far as possible, what has been successful.

Some of the community work has already been touched upon in earlier articles<sup>1</sup> as it was not possible entirely to separate it from the phases of personnel work which dealt more particularly with the employees in their relation to the industry.

<sup>1</sup>See *Labor Review*, January, 1927, pp. 7-19: Medical and hospital service for employees; and May, 1927, pp. 1-16: Outdoor recreation for industrial employees.

Among the most important activities in these towns are the measures taken to safeguard the health of employees and their families through the provision of the services of physicians and visiting nurses and the maintenance of various clinics and classes in home hygiene and the care of the sick as well as by insuring a proper water supply and supervising the other details of town sanitation. The educational facilities in these towns would often be inadequate without the assistance of the company, as in some of the States the school year is short and school funds are not sufficient to provide a satisfactory teaching force. As a result, the company frequently pays the salaries of the teachers for that portion of the school year that the schools would otherwise be closed. In many instances, also, the companies have built and equipped the school and turned it over to the authorities to run. Part-time schools and night classes for cotton-mill workers are also found, as well as domestic-science classes for girls and women, and instruction where there are many foreign workers in their native handicrafts.

Playground supervision for the children is customary and in the cotton mills where many women are employed it is not uncommon to find a well-equipped nursery where babies and small children are fed and cared for during the day. Houses are quite generally provided at moderate and often cheap rentals and in the South the rent usually includes electric light and water. The houses in many of the towns have running water, bathtubs, and fireplaces. There is a quite general tendency to encourage employees to make their homes attractive, and plants and seeds are often given to them and prizes awarded for the most attractive yards. Nearly always there is space for gardens and sometimes additional ground on the edge of town for those who wish more room for vegetables. In a number of cases free pasturage is provided for cows, and a few companies maintain a dairy and good milk is sold to the employees at a moderate price. The difficulty of obtaining milk in some sections of the South makes this an important service. Boarding houses for a single men are usually maintained in mining communities and several textile mills have attractive houses with such conveniences as laundry tubs, electric irons, etc., for the girls. In the majority of these towns the community affairs are centered in a community clubhouse or in an industrial branch of the Y. M. C. A. or the Y. W. C. A.

The trained staff which supervises and administers the various activities in the community is, in the cotton mills of the South, under the direct control of the company, in nearly every case. In other sections, however, the employees participate more largely in their management. A coal-mining company on the Pacific Coast has a thoroughly organized program covering industrial, health, and recreational activities. This company has four mines within a radius of about 50 miles, a town being located at each mine. The affairs of each camp are administered by a mine council composed of workmen elected by popular vote of all the employees. This council handles such questions as wages, welfare, social, and general questions pertaining to the camp, and a central council made up of four elected members from each mine council deals with such problems as relate to all the mines.

This central council has organized a safety association and carried on safety campaigns, developed systematic first-aid and mine-rescue work, and organized social clubs, a mutual-benefit association, thrift campaigns, and systematic savings plans, bands, orchestras, Camp Fire Girls and Boy Scouts, Americanization and citizenship schools, elementary school training of employees, traveling library, and sports. These activities are directed by trained specialists paid by the company. In addition to the mine council composed of employees, a mutual service director acts as conciliator in case of controversy and in an advisory capacity when his services are required.

In other company towns, if the employees have a direct voice in the control of community affairs it is usually through a community club in which membership is open to all.

#### Medical and Other Health Services

**A**MONG the companies providing the services of one or more visiting nurses who either give employees nursing care or visit the homes to see that sick employees are receiving proper attention, a considerable number also extend this service to the families of employees. These nurses are found almost without exception in the mining towns and in many of the textile mill villages. Frequently their entire time is spent in home visiting and, in addition to actual care of the sick, advice and instruction in nursing is given to the women of the village. The nurses give prenatal care and are often of great assistance in helping young mothers to care properly for their babies and young children.

In one town in which a baby clinic is held regularly, charts and accurate records showing the babies' progress are kept and each year a baby show is held and a prize is given to the baby showing the highest score whose mother has attended the clinic. In the baby clinic held by the medical department of another company, children from 6 weeks to 6 years of age are watched by the nurse who weighs them regularly and gives them the attention they need. The school children are also weighed by the nurse every three months and those who are 5 pounds or more underweight are sent to the nutrition class which meets once a week at the dispensary. As soon as these children reach the proper weight they are dropped from the class. A course of 15 lectures on home hygiene and care of the sick is given by the nurse, the mothers and school girls attending in the afternoon and the mill girls in the evening.

Children of school age usually receive free dental treatment and often such surgical attention as the removal of diseased tonsils, adenoids, etc. In addition to these special services, the medical departments in the company towns usually furnish the regular medical and often a considerable part of the surgical care which is needed by the employees and their families.

Although the nurseries conducted by the companies in a number of these villages do not have a health motive as their primary object, their effect from a health standpoint is good, as the children are given expert care. The children are usually taken from 6 to 8 weeks old up through the kindergarten stage and it is undoubtedly a great relief for mothers who are obliged to work to have a place to leave them

where they will be properly fed and cared for. In one of the southern mill towns a matron and three helpers are employed in the nursery which the company maintains. The house has all necessary equipment, including bedrooms where the children may take their naps, and a sun parlor. The children are given three meals a day. There is no charge for this service, although in some of the towns there is a fee for taking care of the children which varies from 5 cents per day per child to \$1 a week.

A company in the Middle West has a free nursery for children 5 years of age and under which has a large sunny playroom equipped for kindergarten work and for recreation. The sleeping room has cots and bassinettes and the children take a nap in the afternoon, or, if their parents are on the evening shift, they are put to bed after supper. They are given a light lunch of orange juice and crackers and a regular luncheon of milk, fresh vegetables, cereals, and a simple dessert. The factory physician examines the children, and medical record cards are kept for each child with data as to weight, health, vision, etc. A kindergarten teacher has direct supervision of the children and a trained dietitian prepares the lunches.

In several towns all underweight school children are given milk at recess and a regular balanced meal at noon prepared by the domestic science class.

#### Education and Clubs

THE educational work in the company towns includes the provision of kindergartens, assistance to the public schools, classes in cooking, sewing, millinery, fruit canning, etc., for the girls and their mothers, manual training for the boys, and evening classes for the employees in subjects for which there may be a demand.

A paper company in New England holds classes throughout the winter for the girls in the factory and for the wives of employees. Instruction is given in sewing, fine needlework, candy making, and various handicrafts such as dyeing, enameling, parchment shade making, etc., the aim being to provide the same opportunities that can be obtained in larger communities where clubs and needlework guilds help in solving household and clothing problems, gift making, and home decorating. A fee of \$5 covers everything taught in these classes. The personnel service director and his wife teach the classes, and in order to keep up to date they go to New York each year to take instruction, the expense of this instruction being borne by the company.

A southern company pays part of the principal's salary and the salary of several special teachers in the public school. The special teachers include a playground teacher, who teaches folk dances and gives the children physical exercises and drills, an art teacher, and a voice teacher who drills the children in chorus singing. This company also has two evening schools giving grammar and high school courses at which some of the men in the mill are enrolled, and there is also a class for illiterates.

In another town in which the company spends a great deal of money in the schools there are two cooking and two sewing teachers hired by the firm. All material is furnished for the cooking classes and there are 160 girls enrolled in this course. Both the cooking and

the sewing lessons are very practical and the children gain experience in preparing meals by cooking and serving dinners for the different clubs.

The welfare department maintained by a company which has been very progressive in the matter of developing the capabilities of the members of the community has six workers who give special attention to constructive and educational work. In the two mill towns of this company these workers have a house which is used as a demonstration home and domestic science school. The enrollment during the year in the women's classes is about 700, the subjects given the most attention being cooking, sewing, and basketry. The cooking classes teach menu planning, balanced meals, food values, economical buying, use of left overs, and proper feeding of children; and in the sewing classes women are taught plain sewing, the use and alteration of commercial patterns, making of house dresses and clothing for infants and children, selection of materials, and determination of styles and colors for different types of garments. House furnishing, millinery, and fancywork are also taught. There is a well-equipped cannery in each village for the use of the housekeepers and the women bring their fruits and vegetables and put them up under the supervision of trained experts.

A company which has a separate kindergarten building with a large enrollment of pupils has rooms in the basement for cooking and carpentry classes. These courses are very popular and there is always a waiting list of boys for the carpentry work.

The club work carried on by the companies includes many troops of Boy Scouts, Campfire Girls, and similar organizations and a variety of clubs among factory employees and the older members of their families. The companies generally pay a great deal of attention to the younger children who are enlisted in the different clubs. The social service workers usually supervise these organizations or sometimes one of the mill employees acts as scoutmaster to the boy scouts' troop. Summer outings are arranged for them and the members of these groups are often given a week in a summer camp by the company.

A textile mill located in a large city hires a worker each summer to take the small children to the playgrounds and direct their play. The children are frequently taken into the country for the day in company trucks, a lunch including a pint of milk for each child, being furnished by the plant cafeteria. Each week during the summer a group of children is taken to a camp at some distance from the city which is leased each year by the company.

The community social affairs are of a varied nature, including parties, dances, amateur theatricals, and usually a Christmas entertainment.

Several of the mills promote interest in flower culture by holding annual rose, dahlia, or chrysanthemum shows at which prizes are given and in a number of cases bulbs and plants are furnished to the residents of the town from the company greenhouses.

A great many of the companies maintain bands and orchestras which furnish one of the favorite forms of entertainment, particularly the outdoor concerts in the summer. Customarily the company buys the uniforms and music and the more expensive instruments

for the members of the band and often there is a special room provided for rehearsals.

The musical organization in one of the textile mills includes two bands, one made up of mill employees and the other composed of school children. A large band hall, comfortably furnished with wicker furniture and containing cabinets for the instruments and music, a piano and a victrola, is provided by the company. A full-time director is employed by the firm, and instruments, music, and winter and summer uniforms are furnished for the players. The junior band numbers about 30 and credit is given the members on their school work and they are given one-half hour a day from school attendance for practice. They use the same instruments that are used by the adults but with different mouthpieces. Outdoor concerts are given by these bands throughout the summer, and they participate in all community affairs.

#### Community Centers

THE social, educational, and recreational activities of the company towns are usually centered in a clubhouse or in a group of buildings in which the various club and game rooms, the gymnasium, and sometimes the auditorium are located. In many cases, however, the school auditorium is used for the community entertainments. Frequently there is either an indoor or outdoor swimming pool which is almost invariably largely used.

A northern textile manufacturing company provided outdoor bathing for the employees and their families by converting the river near their community house into a bathing beach. A section of the shore was cleared and many truck loads of sand and gravel were drawn in and spread and a float with diving boards at different heights, and chutes, etc., were added to the attractions of the beach. Instruction in swimming is given to operatives and their families by the personnel director. So much enthusiasm was aroused that a water carnival has become an annual event on the Fourth of July. There are various events, and swimmers and divers for miles around compete for the prizes, although competition for the prizes in some of the events is confined to operatives in the mill.

An example of well-organized community life is that of a village in New England where the company for more than a quarter of a century has taken an active interest in providing attractive living and working conditions for its employees. This company has many employees who are foreigners—mainly Portuguese and Italians—and it is of interest to note that an unusually large percentage have had a long term of service in the plant. About 10 per cent of the total number of employees have been with the company more than 25 years, while 30 employees have been with it more than 40 years.

The grounds around the plant and the community buildings are laid out like a park and the different activities are centered in different buildings. There is a separate restaurant building, the dining room on the first floor being used largely by woman employees, by members of employees' families, and by outsiders; the men use mainly the one on the second floor where they can smoke and play cards. The prices charged employees represent only the cost of the

food, but regular prices are charged the general public. The library, which is also housed in a separate building, contains about 20,000 volumes. There are three reading rooms, one of which is specially fitted up for children, with smaller tables and chairs, one is for men and boys and has mainly books of travel, biography, and history, and the other is a general reading room. Books may be taken out by employees and their families, by the teachers, and by outside school children for their work, while the reading rooms are open to any one. A kindergarten building has three classrooms, a large assembly room, and a sand room. All the rooms have special decorations suited to the small children. This is for the exclusive use of employees' children and there is no charge except a small enrollment fee. The auditorium or community building is one of the newer buildings and has reception rooms, cloakrooms, and a lounge, together with parlors for the women and smoking rooms for the men. There is an auditorium (with a fine lighting system) on the second floor, and this has a seating capacity of 600. This building serves as the social center of the town, and here frequent card parties are held and a dance is given each month by the men's club; various lodges and clubs hold their dances and social affairs in this building.

The men's club, membership in which is open to all male employees, their grown sons, and to stockholders of the company, has a club-house given by the company, which was a fine old farm house altered to suit the club's needs but in which the colonial finish was preserved as far as possible. There are bowling alleys, billiard and card rooms, a reading room, and a large lounging room. The company furnishes the house rent free, but the running expenses are paid by the members and the management is entirely in their hands.

Sewing, embroidery, dressmaking, etc., are taught at the "art craft" shop. The materials are sold at cost to families of employees and there is an art department where the women may leave their fancy work to be sold if they wish. The provisions for outdoor recreation include baseball and football grounds, a children's playground which also has tennis courts for the use of the children, and bathhouses on the beach with a swimming instructor provided. Houses have been provided since 1899 and all houses now have modern plumbing and hardwood floors. Reasonable rents are charged, the maximum being about \$20 a month, and employees who wish to build their own homes are loaned money by the company for this purpose.

While the community work varies in different places and localities according to the different conditions present, its chief value would seem, in viewing it as a whole, to be the attention given to safeguarding the health of the children and the opportunity given them to secure a better education often than their parents have had, as well as the chance to have any special capability recognized and fostered.

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### Community Recreation in the United States

COMMUNITY organization for recreational purposes is increasing rapidly throughout the country as shown by a report of this movement for 1926. The number of cities reporting community recreation programs under trained leadership had in-

creased from 502 in 1921 to 758 in 1926, and the number of trained workers from approximately 11,000 to more than 17,000.<sup>1</sup> There was a marked increase also in the number of city governments appropriating funds for the support of community recreation activities and in the number of cities having training institutes for training both paid and volunteer leaders. In addition to the large number of paid workers, 249 cities reported that 8,625 trained volunteers were enlisted in carrying out the community recreation programs.

The facilities provided include outdoor playgrounds in 704 cities, indoor recreation centers in 240 cities; community houses for recreation purposes in 157 cities; a total of 276 bathing beaches in 157 cities; swimming pools maintained under leadership, part of them being open the year round, in 241 cities; municipal golf courses in 130 cities; summer camps maintained in connection with the recreation program in 78 cities, and other play areas which do not come under the foregoing classifications in 85 cities.

The majority of the recreation programs are administered by boards, commissions, or other departments under the municipal organization but a large number of private organizations are also concerned in the provision of recreation facilities.

The peculiar conditions of population congestion in some of our cities make the provision of adequate recreation space a problem. According to a note in *Medical Insurance*, May, 1927, New York City is meeting this situation by the construction of a special sort of playground, the first one of which is to serve the lower east and west sides of the city.

The playground will be six stories high and will be built in the form of five terraces with open-air ramps leading to each level. There will be over 100,000 square feet of open-air play space and about 127,000 square feet of indoor space which will contain an auditorium, dance hall, swimming pool, gymnasium, and bowling alleys and regular playground equipment for the small children. It is expected that rents from stores on the street level will pay the operating expenses.

<sup>1</sup> *The Playground*, New York, April, 1927, pp. 5-12. "Community recreation leadership in 700 cities."

located to Indians and has 1,000,000,000 acres of land available for colonization, which is to include all of the State, except the Federal District, and the Amazonas River basin, which is to be divided into 100,000,000 plots of 100,000 acres each.

## COLONIZATION

### Colonization Schemes in Amazonas, Brazil

**A** REPORT from the American vice consul, George E. Seltzer, at Manaos, Brazil, dated March 12, 1927, gives an account of a plan adopted by the State government of Amazonas, Brazil, to promote the settlement of Japanese in that State.

On March 11, 1927, the State government drew up an agreement with two Japanese business men whereby the latter are to be granted 1,000,000 hectares<sup>1</sup> of land for purposes of colonization and agricultural development.

The concessionaires are given two years from the signing of the agreement to study three distinct zones in order to determine the boundaries, location, nature, and physical characteristics of the soil and to select one of the zones or certain strips of land therein until they have 1,000,000 hectares. Within a year the concessionaires shall organize a company with which the president shall sign a contract for a period of 50 years.

The concessionaires assume the following obligations: (1) To establish Japanese agricultural colonies in the State; (2) to bring in 300 Japanese families during the first year after their company has been authorized; (3) to organize and maintain a medical service for the colonists and their families; (4) to bring in at least 10,000 Japanese families during a period of 50 years, which is the life of the contract; (5) to maintain elementary schools in accordance with State laws. After the first 300 families have been settled in the State, the current of immigration must be continuous. If the immigration is discontinued for a period of six months, except in case of force majeure, the Government is entitled to suspend the contract. If it is discontinued for a period of two years the concessionaires will lose their right to the lands.

The contract stipulates that if at the end of 50 years the 10,000 families have not settled in Amazonas the colonization company shall return the land in the proportion of 100 hectares for every family under that number or it may reimburse the State by paying for the land.

The State government on its part shall give title to the lands included in the concession, and exempt it from all present and future taxes for a period of 10 years. The exemption shall apply to improvements made on the land, including factories, mills, shops, and machinery. The State government shall also attempt to obtain similar tax exemptions from the Federal authorities and from the municipalities. In addition, the State is to provide free lodging for the Japanese immigrants for a month after their arrival.

<sup>1</sup> 1 hectare = 2.47 acres.

## WAGES AND HOURS OF LABOR

### Wage Rates and Hours Established by Recent Agreements

#### Bakers

*BAKERSFIELD, Calif.*—The agreement of Bakers' Union No. 146, dated May 1, 1927, provides for a weekly scale as follows: Foremen, \$50; oven men and dough mixers, \$43; bench hands, \$40; apprentices, \$21 first six months, \$28 second six months, and \$35 thereafter.

*Fort Worth, Tex.*—The agreement of Bakers' Union No. 200, dated May 1, 1927, provides for the following weekly scale: Foremen, \$41.50; mixers, oven men, and second hands, \$37; bench hands or machine hands, \$33.40; apprentices, \$24.

*Ottumwa, Iowa.*—The agreement of Bakers' Union No. 412, dated May 1, 1927, provides for a weekly scale as follows: Foremen, \$40; oven men and dough mixers, \$32; bench and machine men, \$30; helpers, \$26; apprentices, \$20; women, \$15.

In each agreement a week consists of 6 days of 8 hours each, and for overtime time and a half is paid.

#### Brewery Workers

*FORT WAYNE, Ind.*—Local Union No. 62 made an agreement, effective April 1, 1927, containing the following scale: Cellar men, brewhouse men, drivers, and chauffeurs, \$29 per week; bottlers and yardmen, \$27.50; night men, \$1 per week additional. A day consists of 8 hours. For overtime and for work on Sundays and holidays time and a half is paid.

*Nashville, Tenn.*—An agreement made by Local Union No. 101, effective May 1, 1927, contains the following scale of weekly wages: Cellar men, brewhouse men, warehousemen, and city drivers, \$25; shipping drivers, \$21; coopers and bottlers, \$20; permit-card men, \$17. A day consists of 9 hours, a week of 6 days. For overtime and for Sunday and holiday work time and a half is paid.

#### Cooks—Denver, Colorado

THE Industrial Commission of Colorado, in File No. 1337, decided June 17, 1927, awarded an increase of 50 cents a day to the Denver Cooks' Association, Local No. 18, composed of employees of the Denver Restaurant Keepers' Association.

#### Culinary Workers—Sacramento, Calif.

*CULINARY* Workers' Union No. 561, of the Hotel and Restaurant Employees' International Alliance, made an agreement with individual employers in Sacramento, Calif., June 1, 1927. The

following daily scale, which includes board for the employees, was adopted:

*Hotels.*—Dinner cooks, \$8; pastry chiefs, \$10; assistant pastry men, \$6; fry cooks, roast cooks, broiler cooks, and garde marge, \$7; pantrymen, \$6; butchers, \$8; helpers to cooks, pastry chiefs, garde marge, and butchers, \$4. Cash-house waiters and waitresses, 8 hours in 13, \$3; cash-house waiters and waitresses, 6 hours, one split only, \$2.50; extra waiters and waitresses for lunch, 3 hours, \$2.50; extra waiters or waitresses for dinner, 3 hours, \$3.50; extra waiters or waitresses a la carte, 8 hours, \$5; steady waiters, 1 meal, \$1.50. Overtime waiters and waitresses, 75 cents per hour.

*Cafés, restaurants, and lunch rooms.*—Dinner cooks, \$7.50; pastry cooks, \$6.50; fry cooks, butchers, and all other cooks, \$6; pantrymen and pantrywomen, and steam-table men and women, \$5; cooks' helpers on range, 3 hours or less, \$4.50; waiters and waitresses on counters and tables, \$4; waiters and waitresses on tables and booths, \$3.50; waiters and waitresses, 6 hours, one split, \$3; waiters and waitresses, 1 extra shift Saturday, Sunday, or holiday, \$5; waiters and waitresses, 3 hours or less, lunch or dinner, except Saturday, Sunday, or holidays, \$2.50; waiters and waitresses, 3 hours or less, lunch or dinner, Saturday, Sunday, or holidays, \$3.50; overtime cooks, waiters, and waitresses, \$1 per hour.

*Coffee shops.*—Dinner cooks, \$7.50; pastry chiefs, \$10; pastry cooks' assistant, \$6.50; fry cooks, \$6; pantrymen and pantrywomen, steam-table men and women, \$5; cooks' helpers on range, 3 hours or less, \$4.50. All cooks, pantrymen, and pantrywomen working short shift, \$1 per hour. Three hours shall constitute a short shift. Waitresses, 8 hours in 12, \$3; 6-hour shift, one split only, \$2.50.

*Banquets.*—Luncheon, 3 hours or less, \$2.50; dinner, 3 hours or less, \$3.50; overtime, \$1 per hour or fraction thereof.

#### Machinists—Baltimore

DISTRICT Lodge No. 12 of Machinists made an agreement with the Belmar Machine Co., February 3, 1927, containing a scale of 80 cents per hour for machinists, 65 cents for specialists, and 50 cents for helpers. A week consists of 44 hours. The overtime rate is time and one-half for the first 8 hours per week and double time thereafter. Double time is paid for work on Sundays and holidays.

#### Pressmen—Danville, Ill.

PRINTING Pressmen's Local Union No. 257 made an agreement with the Danville (Ill.) Newspaper Publishers' Association for three years from June 1, 1927, providing for a day scale of \$43 per week of 48 hours for pressmen and \$33 for first assistants. Night rates are \$2 more. The overtime rate is time and a half.

#### Railways, Electric

CHICAGO & Joliet Electric Railway Co.—An agreement was made by the Chicago & Joliet Electric Railway Co. and the Chicago & Joliet Transportation Co. with the Electric Railway Employees, Division No. 228, March 8, 1927, effective for three years from January 1,

1927. Under the agreement trainmen and coach operators are to work 9 hours a day, with every eighth day off. Time and a half is to be paid for overtime; for overtime on snowplow work and on sweepers, \$1 per hour.

The scales established are as follows:

AGREED WAGE RATES ON STREET RAILWAYS, FOR 1927, 1928, AND 1929

Class of work	Rate per hour (cents)		
	1927	1928	1929
<b>One-man car operation :</b>			
First three months	57.0	59.0	59.0
Next nine months	59.0	61.0	61.0
After first year, regular rate on line assigned—			
Joliet city car and coach service	61.5	63.5	65.0
Lyons, Lockport-Rockdale and Dellwood Park	63.0	65.0	65.0
Chicago interurban division, local car service	68.0	69.0	69.0
Chicago interurban division, through car service	68.0	70.0	70.0
<b>Two-man car operation :</b>			
Baggage, freight, work car, line repair car and line tower truck	63.0	65.0	65.0
Snowplow and sweepers	82.0	84.0	84.0
Passenger cars	(1)	(1)	(1)
Car hostlers	61.5	63.5	65.0
Crossing flagmen and Cicero Avenue ticket agents	(2)	(2)	(2)
Relief flagman and relief ticket agents	56.0	56.0	56.0
Armature winders	72.5	74.5	74.5
Armature winders' helpers	61.5	63.5	65.0
Electricians, first class	65.0	68.0	70.0
Electricians, second class	61.5	63.5	65.0
Welders, gas and electric	66.0	68.0	68.0
Blacksmiths	70.5	72.5	72.5
Blacksmiths' helpers	58.0	60.0	62.0
Carpenters, foremen	81.5	83.5	83.5
Carpenters	71.5	73.5	73.5
Machinists	85.5	85.5	85.5
Machinists' helpers	66.5	68.5	68.5
Truckmen	61.5	63.5	65.0
General repair men (day)	60.0	62.0	65.0
General repair men (night)	66.5	69.0	70.0
Brake inspectors (night)	69.0	70.0	70.0
Car repair men, Summit substation (night)	69.0	70.0	70.0
Barn helpers, Summit substation (night)	64.5	66.5	68.0
Painters' helpers	58.5	60.5	62.0
Car washers, foremen	56.5	58.5	60.0
Car washers, sweepers, stove tenders (day)	48.5	50.5	52.0
Car washers, sweepers, stove tenders (night)	54.0	56.0	58.0
Firemen (day)	48.5	50.5	52.0
Firemen (night)	54.0	56.0	58.0
Night barn foremen's helpers	64.5	66.5	68.0
Switchmen	64.5	66.5	68.0
Automotive mechanics (day)	61.0	63.0	65.0
Automotive mechanics' helpers (day)	51.0	53.0	54.5
Automotive mechanics (nights)	64.0	66.0	67.5
Automotive mechanics' helpers (nights)	54.0	56.0	57.5
Coach washers (day)	48.5	50.5	52.0
Coach washers (night)	54.0	56.0	58.0
<b>Rate per month</b>			
Day barn foremen	\$162.50	\$167.50	\$167.50
Assistant shop foremen	198.00	204.00	204.00
Night barn foremen	178.00	183.00	183.00
Night watchmen	132.00	134.00	134.00

<sup>1</sup> 5 cents less than one-man car operators.

<sup>2</sup> \$130 per month.

<sup>3</sup> For first year of service 56.5 cents per hour.

<sup>4</sup> For first year of service 63 cents per hour.

<sup>5</sup> For first year of service 46.5 cents per hour.

<sup>6</sup> For first year of service 52 cents per hour.

*Shamokin & Edgewood Railway Co.*—The Shamokin & Edgewood Electric Railway Co. made an agreement with Electric Railway Employees, Division No. 641, February 1, 1927, to pay regular

motormen, conductors, and bus operators 52 cents per hour, extra men 47 cents per hour, barn helpers 45 cents per hour, and linemen \$4.61 per day.

#### Roofers and Sheet-Metal Workers—Atlantic City

THE Roofers and Sheet Metal Workers' Local Union No. 43, of Atlantic City and vicinity, made an agreement with the Master Sheet Metal Contractors' Association of the same district, effective April 1, 1927. The wage scale is as follows: Sheet-metal workers and slate and tile roofers, \$1.50 per hour; helpers, 62½ cents; apprentices first year, \$15 per week, second year \$20, third year \$25, fourth year \$30; foremen of slag and composition roofers, \$1.50 per hour; roofers and kettlemen, \$1.25; apprentices, 62½ cents. Forty-four hours constitute a week's work.

#### Stereotypers—Pueblo, Colo.

THE Industrial Commission of Colorado, after considering the request of Stereotypers' Local Union No. 67 for an increase of 25 cents per day from the newspaper publishers of Pueblo, on June 27, 1927, ordered that the rate should remain unchanged at \$7 per day, \$7.50 per night, foremen to receive \$1 extra, and that a contract be made between the parties, effective June 1, 1927.

#### Teamsters—Chicago

ACCORDING to the agreement of Dairy Employees' Union connected with Local No. 754 of the Teamsters' Union, made May 1, 1927, junior clerks receive \$34 per week for the first three months of experience, \$36.50 for the second three months, and \$39 per week thereafter; senior clerks, \$53; foremen, cashiers, route account or sales bookkeepers, \$49; Pasteurizer men, pan-men receivers, inspectors of milk, butter and cheese makers, and refrigerator men, \$46; engineers, \$47; miscellaneous men, \$44; and butter wrappers, \$33.

#### Train Dispatchers—Hocking Valley Railway Co.

THE Hocking Valley Railway Co. made a new agreement with its train dispatchers February 16, 1927, those on the river division receiving \$9.38 per day and those on other divisions \$9.78. The assistant chief dispatcher receives \$10.98. Eight hours constitute a day's work. Overtime is paid for at regular rates; less than 30 minutes are not to be counted, 30 to 60 minutes are to be counted as one hour, and six days to count as one week.

#### Typographical Unions

CENTRALIA, Ill.—A three-year agreement was made on May 1, 1927, by Typographical Union No. 479, at Centralia, Ill. The book and job men work 44 hours a week. Journeyman receive \$37 per week, machinist operators \$39, foremen \$39.50 for day work, \$3 additional for night work. Apprentices receive \$14.50 per week during the

second year, \$17.50 the third year, \$20.50 first six months of the fourth year, \$23.50 second six months of the fourth year, \$26.50 first six months of the fifth year, and \$29.50 for the second six months of the fifth year. The newspaper scale provides for a week of 48 hours. Journeymen receive \$40.50, machinist operators and foremen \$43 for day work; journeymen and foremen receive \$2 additional for night work and machinist operators \$2.50 additional. Apprentices on newspapers receive \$1 per week more than apprentices on book and job work.

*Keokuk, Iowa.*—Typographical Union No. 68, Keokuk, Iowa, made an agreement with the employing printers for one year, January 1, 1927. The book and job scale for a 44-hour week is: Foremen \$37, journeymen \$35 for day and \$38 for night work. The newspaper scale for a 48-hour week is: Foremen \$40, journeymen \$38 for day work, \$3 additional for night work. Apprentices receive one-third journeymen's wages in the third year, one-half during the fourth year, and three-fourths the fifth year.

*New Bedford, Mass.*—An agreement between the Typographical Union No. 276 and the newspaper publishers of New Bedford, Mass., effective January 17, 1927, to December 2, 1927, provides for a weekly scale of \$42 for day work and \$45 for night work for a 48-hour week. Machinist operators receive \$3 per week more. In the third year apprentices receive one-half the journeyman's scale, in the fourth year five-eighths, and in the fifth year three-fourths.

*Zanesville, Ohio.*—Typographical Union No. 199 made a three-year agreement with the publishers of Zanesville, Ohio, effective February 1, 1927, as follows: Book and job scale, 44 hours per week, foreman, day work, \$43; journeymen, \$40; night work, \$3 additional. One dollar increase over these amounts becomes effective February 1, 1929. Machinist operators receive \$1 above the scale. The newspaper scale for 48 hours per week is \$4 a week above the book and job scale. In each of these cases overtime is paid for at the rate of time and a half.

### Working Hours of Farmers<sup>1</sup>

OFTEN the question is raised as to how much farmers work as compared with those in other industries. Farm-management studies undertaken in recent years by the Bureau of Agricultural Economics in cooperation with State colleges of agriculture offer interesting information on the subject. As a part of these studies a careful and complete record is kept of all work done by each member of the labor force on small groups of farms. The average number of hours worked by the farm operator and by all other workmen in some of the areas in which studies have been or are being undertaken is shown in Table 1.

<sup>1</sup> Reprinted from United States, Department of Agriculture, Yearbook of agriculture, 1926: "Working-day of farmers a high average," by J. B. Hutson, Washington, 1927, pp. 785, 786.

TABLE 1.—THE AVERAGE NUMBER OF HOURS WORKED BY THE FARM OPERATOR AND ALL OTHER WORKMEN FOR ONE YEAR IN SELECTED FARMING AREAS

State	Farming area	Year	Num-ber of farms	Opera-tor's labor (hours)	All other labor (hours)
Colorado	Irrigated diversified crop and sheep feeding	1924	21	2,590	5,165
Montana	Irrigated diversified crop	1920	16	2,831	2,812
Kansas	Winter wheat	1925	21	3,273	2,237
North Dakota	Spring wheat	1925	22	3,076	3,353
South Dakota	do	1925	19	3,098	3,938
Minnesota (south)	Diversified crop and livestock	1923	23	3,224	2,505
Minnesota (north)	Dairying	1925	29	3,242	3,332
Wisconsin	do	1922	23	3,405	3,280
Ohio (south)	Diversified crop and livestock	1923	20	3,027	2,830
Ohio (north)	do	1923	17	3,283	3,590
Iowa	do	1925	22	3,213	3,629
North Carolina	Tobacco and livestock	1925	20	2,781	6,694
Texas	Cotton (black-land belt)	1925	19	2,024	3,340

The hours of work shown in Table 1 include only the physical labor performed. The hours shown consist of work in the fields on crops, feeding and caring for livestock, and miscellaneous maintenance and repair work about the farm. In addition the farm operator performed the duties incident to the management of the farm, including the supervision of the work done by other workmen. The average amount of work done by other workmen on these farms is shown also in the table.

There is considerable variation in the number of hours worked during the year by the different farm operators. For example, one farmer in northern Minnesota worked only 848 hours, while another worked 3,948 hours. However, 25 out of the 29 farmers in this area for whom data are shown worked between 2,700 and 3,700 hours, the average for the group being 3,242 hours.

The variations in this area are fairly typical of the variations in the other areas. It should be remembered that data are included for farm operators of all ages, some of whom were supervising several other workmen. On the other hand it is possible that the farmers for whom data are shown worked more hours than the average since, as a rule, the more enterprising farmers are more likely to be interested in records of this kind.

The average number of hours worked per day by seasons in the different areas with week day and Sunday given separately is shown in Table 2. From these data it appears that most farmers keep busy during the spring and summer—perhaps a larger number of them work on the average more than 10 hours per day than work less. Many of them also work long days in the fall—perhaps more of them work on the average longer than 9 hours per day than work less. Perhaps as many of them work 8 hours per day or more as work less during this winter period. The amount of work done during the winter season varies with the type of farming followed, being heaviest on those farms on which much livestock is kept. In addition to the week-day work, considerable farm work must be done on Sunday. This is particularly true on farms on which dairying is the principal enterprise.

It is not to be assumed from these data that farmers work every day during the year. Practically every farmer takes a day off now

and then. A given farmer will work more some days than others during the same season. The data merely show the average number of hours worked considering all workdays and Sundays.

TABLE 2.—AVERAGE HOURS WORKED BY FARM OPERATORS BY SEASONS, WEEK DAY AND SUNDAY SEPARATE

State	Winter <sup>1</sup>		Spring		Summer		Fall		Yearly average	
	Week day	Sun-day	Week day	Sun-day	Week day	Sun-day	Week day	Sun-day	Week day	Sun-day
Colorado	6.0	3.6	7.6	2.5	9.6	3.8	7.7	2.6	7.7	3.1
Montana	6.3	3.4	8.1	4.4	10.0	4.6	8.9	4.5	8.3	4.2
Kansas	8.5	5.2	10.1	4.7	10.8	3.7	9.6	4.2	9.7	4.4
North Dakota	7.4	4.8	10.0	5.0	10.2	4.5	9.4	4.4	9.3	4.7
South Dakota	7.0	4.5	10.2	4.6	10.0	4.3	9.5	3.8	9.2	4.3
Minnesota (south)	9.9	5.5	10.3	4.4	10.1	4.2	7.7	4.0	9.5	4.7
Minnesota (north)	8.7	5.2	10.2	4.7	10.0	3.7	9.6	4.2	9.6	4.5
Wisconsin	8.9	7.0	10.1	6.7	10.2	5.2	10.2	5.7	9.9	6.2
Ohio (south)	7.4	4.0	9.9	4.2	9.3	3.5	9.5	3.8	9.0	3.9
Ohio (north)	8.7	4.8	10.4	5.3	9.8	3.9	10.0	3.9	9.7	4.6
Iowa	8.3	3.4	10.7	3.3	10.3	2.9	9.6	2.8	9.8	3.1
North Carolina	7.0	1.4	9.0	1.5	10.0	1.5	8.6	1.4	8.7	1.4
Texas	5.5	1.7	6.1	1.8	6.8	1.9	6.3	1.7	6.2	1.8

<sup>1</sup> The year is divided into four equal parts, with December, January, and February considered winter, the following three months, spring, etc.

## Wages, Hours, and Employment in Mechanical-Engineering Industries

A REPORT compiled for the use of the International Economic Conference<sup>1</sup> covers the general condition of the mechanical-engineering industry throughout the world. The term "mechanical engineering" as used in the report covers machine shops manufacturing office appliances, sewing and knitting machines and other machines for domestic and industrial use, steam locomotives, traction, power, and driving engines, mechanical agricultural implements, weighing appliances, finished machine parts, and steam and water fittings, but does not include electrical apparatus, boilers, vehicles, nonmechanical agricultural implements, bridges, or precision machine products.

### Employment in the Industry

THE table below, taken from this report, shows in round numbers the changes in number of workers employed since pre-war times and the per cent of the total workers in the industry who were employed in each country in 1913 and 1925.

<sup>1</sup> League of Nations. Economic and Financial Section, C. E. I. No. 15: Mechanical engineering. Geneva, 1927. 2 vols.

TABLE 1.—NUMBER AND PER CENT OF WORKERS EMPLOYED IN MECHANICAL ENGINEERING INDUSTRY IN SPECIFIED COUNTRIES, 1913 AND 1925

Country	1913		1925	
	Number of workers	Per cent of total	Number of workers	Per cent of total
America:				
United States.....	620,000	32.8	582,000	28.3
Canada.....	40,000	2.1	40,000	1.9
Europe:				
Great Britain.....	330,000	17.4	500,000	24.4
Germany.....	460,000	24.3	452,000	22.0
Russia.....	130,000	6.9	98,000	4.8
Austria-Hungary or the Succession States.....	80,000	4.2	66,000	3.2
France.....	45,000	2.4	85,000	4.1
Italy.....	30,000	1.6	35,000	1.7
Belgium.....	24,000	1.3	25,000	1.2
Switzerland.....	42,000	2.2	45,000	2.2
Sweden.....	25,000	1.3	20,000	1.0
Other European countries.....	30,000	1.6	40,000	1.9
Australasia and Asia:				
Australia and New Zealand.....	15,000	.8	20,000	1.0
Japan.....	20,000	1.1	47,000	2.3
Total.....	1,891,000	100.0	2,055,000	100.0

Table 2 shows what per cent of the total normal working force was employed after the war in Great Britain, Germany, and the United States.

TABLE 2.—PER CENT OF NORMAL FORCE EMPLOYED IN GREAT BRITAIN, GERMANY, AND THE UNITED STATES, 1920 TO 1925

Year	Great Britain	Germany	United States
1920.....	196.5		97.1
1921.....	177.0	89.6	58.4
1922.....	171.2	90.0	60.6
1923.....	177.9	81.7	90.0
1924.....	84.7	70.5	76.4
1925.....	87.4	71.8	74.5

<sup>1</sup> Figures lacking for certain months.

Concerning this table the report comments as follows:

It may be seen from the table that the movement of the degree of employment is quite different in the three countries. Great Britain and the United States were both hard hit by the world crisis which set in in 1921, whereas Germany, in consequence of inflation, escaped its effects. In 1922 there was a revival in the United States, which reached its highest point in 1923. From then onward the degree of employment falls again sharply. As the trade revival in the United States originated in the American home market, Great Britain had no share in it; the degree of employment increased steadily until 1925. In the case of Germany stabilization involved a diminution of employment, which, however, is not very considerable because foreign credits prevented the stabilization crisis from exercising its full effects. The crisis did not arise until the end of 1925, and this does not appear in the annual figures for 1925; it is a movement in which the other countries are not involved.

#### Trend of Wages in the Industry

TABLE 3 shows wages paid in 1913-14 and at the end of 1925 and index numbers of wages based on the pre-war figures. The report points out the difficulties that lie in the way of comparisons of wage data from different countries. The table shows only nominal wages and these "give no indication of the purchasing power and therefore of the standard of living of workers in the different countries. In a comparison of real wages the differences in the wage level would be substantially less."

TABLE 3.—WEEKLY WAGES OF SKILLED AND UNSKILLED WORKERS IN THE MECHANICAL-ENGINEERING INDUSTRY IN SPECIFIED COUNTRIES, 1913-14 AND 1925, AND INDEX NUMBERS THEREOF

Country	Skilled workers			Unskilled workers		
	1913-14	End of 1925		1913-14	End of 1925	
		Amount	Index number (1913-14 = 100)		Amount	Index number (1913-14 = 100)
Australia	\$16.87	<sup>1</sup> \$26.36	156	\$11.50	<sup>1</sup> \$20.27	180
Austria	wage scale	5.66	5.74	101	4.25	4.79
Belgium	do	6.75	7.43	110	3.98	5.03
Canada	do	19.28	30.58	161	—	—
Czechoslovakia	do	—	8.11	—	4.57	—
France	actual earnings	—	8.51	—	5.19	—
Germany	wage scale	8.79	11.01	126	5.60	7.42
Great Britain	do	9.93	14.33	144	5.54	9.74
Hungary	average wage	6.85	—	—	3.58	—
Italy	wage scale	—	6.81	—	5.26	—
New Zealand	—	15.71	<sup>1</sup> 20.30	129	—	—
Russia	average earnings	<sup>2</sup> 3.99	<sup>2</sup> 10.35	260	( <sup>3</sup> )	( <sup>3</sup> )
Sweden	do	<sup>2</sup> 6.66	<sup>2</sup> 14.76	221	( <sup>3</sup> )	( <sup>3</sup> )
Switzerland	actual earnings	7.35	<sup>1</sup> 14.10	192	5.64	<sup>1</sup> 10.81
United States	do	14.84	30.78	207	10.89	24.43
						224

<sup>1</sup> 1924.<sup>2</sup> Includes also unskilled.<sup>3</sup> Included with skilled.

The rates paid in certain occupations for which data are available for the various countries are shown in Table 4, the rates being reduced to the basis of the 48-hour week where this could be computed. In certain cases noted in the table a weekly rate is given, but the number of hours in the working week was not given in the report.

TABLE 4.—WEEKLY WAGES PAID IN THE MECHANICAL-ENGINEERING INDUSTRY OF SPECIFIED COUNTRIES, BY OCCUPATIONS

Country	Date to which figures apply	Lock-smiths	Smiths	Fitters	Pattern-makers	Turners	Iron molders	Laborers
		Average wages <sup>1</sup>						
Austria (Vienna) <sup>2</sup>	End of June, 1925	\$7.09	\$7.73	—	—	\$7.49	—	—
Finland	July, 1924	—	7.51	—	—	8.27	—	—
France (Paris):								
Time work	February, 1925	9.28	9.63	\$9.65	\$11.40	9.71	—	\$6.31
Piece work	do	10.01	10.62	10.44	11.99	10.44	—	6.64
Great Britain	Sept. 30, 1925	—	—	—	14.77	13.70	\$14.55	9.74
Japan <sup>3</sup>	Second half, 1925	—	5.48	5.88	<sup>2</sup> 5.88	5.71	—	—
United States <sup>4</sup>	1925	—	34.42	30.86	38.59	—	37.21	—
		Wages established by collective agreement <sup>1</sup>						
Australia (Sidney and Melbourne) <sup>5</sup>	Dec. 31, 1925	—	—	\$25.50	\$27.61	\$25.50	—	\$20.01
Belgium (Brussels)	Oct. 1, 1925	—	—	6.65	7.96	7.01	\$6.97	4.86
Canada (13 chief towns)	1925	—	\$31.01	—	—	—	31.15	—
Czechoslovakia (Prague)	Dec. 1, 1925	—	—	7.86	9.48	7.10	7.86	4.59
Italy:								
Rome	Oct. 1, 1925	—	—	6.63	—	6.63	9.35	5.26
Milan	do	—	—	6.31	—	6.82	6.76	5.07
Norway (Oslo)	Dec. 1, 1925	—	—	17.06	17.06	17.06	17.06	14.53
Poland (Warsaw)	Oct. 1, 1925	—	—	6.50	6.50	6.50	6.50	4.22

<sup>1</sup> Converted into United States money on basis of average exchange rate, as follows: Austria, 14.05 cents; Finland, 2.51 cents; France, 5.28 cents; Great Britain, \$4.85; Japan, 41.55 cents; Australia, 24.70; Belgium, 4.40 cents; Canada, par; Czechoslovakia, 2.96 cents; Italy, 4.06 cents; Norway, 20.31 cents; and Poland, 17.59 cents.

<sup>2</sup> Hours in working week not specified.

<sup>3</sup> Makers of wood patterns.

<sup>4</sup> Foundries and machine shops only; data from U. S. Bureau of Labor Statistics Bulletin No. 422.

<sup>5</sup> Minimum wages; hours in working week not specified.

### Hours of Work

**I**N GREAT Britain before the war the working hours in the mechanical-engineering industry were 53 to 54 per week. Since 1919 the standard working week has been 47 hours, but this is subject to the modification that the employer may call upon the workers for overtime up to 30 hours in each four weeks.

The pre-war agreed hours of work per week in Germany were a little over 54. In 1925 the average working week was 51.4 hours, a reduction of about 5 per cent.

Average hours per week in this industry in the United States in 1914 were 55½ per week. In 1923 the average had dropped to 52.

In other countries a working-day of from 9 to 10 hours was almost universal. Since the war, however, the eight-hour day has been general, though the hours actually worked may be fewer or greater, according to market conditions.

### Wages of Placer Miners in Alaska

**A**BULETIN recently issued by the United States Bureau of Mines,<sup>1</sup> dealing with the placer-mining industry in Alaska, contains data on wages of employees of placer camps, from which the following is taken.

Placer miners are paid high wages but usually have employment only from three to five months of the year. Although in a few places the men board themselves, generally board is given in addition to wages. The daily cost of boarding the men ranges from \$1.50 to \$4. The statement below shows, for the various types of labor, the wages paid. In general, the lower wages are those paid in the larger and more accessible camps and the higher wages are those paid in some of the more remote places, though there is more or less variation in wages even in the same locality. In all cases, except where noted, board is furnished in addition to the wage rate shown.

	Wages per day
General labor.....	\$4. 00-\$8. 00
	<sup>2</sup> 8. 00-12. 00
Skilled labor:	
Foremen.....	6. 50- 8. 00
Pipemen.....	5. 50- 9. 00
Carpenters.....	7. 00- 9. 00
Engineers.....	6. 00-10. 00
Blacksmiths.....	6. 00- 9. 00
Pointmen.....	6. 00- 7. 00
Stackmen.....	5. 25
Hoistmen.....	5. 25

At the larger mines underground workers usually work in two shifts of 8 hours each. At the open-cut mines 10-hour shifts are general, and in mines having hydraulic systems shifts of 10, 11, or even 12 hours are found, though often at higher rates. The size of the operation, the labor, the water supply available, and other conditions determine the number of shifts worked.

The accessible camps usually experience no difficulty in obtaining labor, but some of the isolated camps find it difficult to obtain men after the season has started, and some employers offer a bonus to men who remain for the whole season.

<sup>1</sup> United States. Department of Commerce. Bureau of Mines. Bul. No. 289: Placer-mining methods and costs in Alaska, by Norman L. Wimmer. Washington, 1927.

<sup>2</sup> No board.

It is stated that in the smaller or more remote districts most of the labor is performed by prospectors and others who live there. The more experienced and efficient of these men usually have their own mines. It is a common practice to form a partnership of two to six to operate a mine, especially if it is a drift mine, and personal interest and efficiency are promoted thereby. Most itinerant labor has not had much experience in placer mining.

### Wages in Chilean Coal Mines and Copper Mines in 1925<sup>1</sup>

THE Central Statistical Office of Chile published in its statistical yearbook for 1925 (mining and metallurgy section) data showing the average daily wages of underground and surface workers in copper mines and coal mines in Chile for the year 1925. The annual working days are also given for the coal-mine workers. The following tables are taken from this report:

TABLE 1.—NUMBER AND AVERAGE DAILY WAGES OF WORKERS IN CHILEAN COPPER MINES IN 1925, BY PROVINCES

[Average exchange rate of Chilean peso in 1925=11.6 cents]

Provinces	Underground workers		Surface workers		All workers		
	Number	Daily wages	Number	Daily wages	Number	Daily wages	Equivalent in United States currency
Tarapacá	2	9.45	5	9.00	7	9.13	\$1.06
Antofagasta	640	12.33	460	12.19	1,100	12.39	1.44
Atacama	538	6.95	147	5.73	685	6.69	.78
Coquimbo	390	6.28	88	5.68	478	6.17	.72
Aconcagua	351	8.22	180	7.96	531	8.18	.94
Valparaíso	42	9.23	42	9.23	84	9.23	1.07
Santiago	148	11.89	60	10.00	208	11.35	1.32
Total	2,111	9.12	982	9.59	3,093	9.27	1.08

TABLE 2.—AVERAGE NUMBER OF WORKING-DAYS PER YEAR AND NUMBER AND AVERAGE DAILY WAGES OF WORKERS IN CHILEAN COAL MINES IN 1925

[The average exchange rate of Chilean peso in 1925=11.6 cents]

Mines	Num- ber of work- ing- days	Underground workers		Surface workers		All workers		
		Pick miners		Other workers		Num- ber	Aver- age daily wages	Num- ber
		Number	Aver- age daily wages	Num- ber	Aver- age daily wages			
Lirquén	232	55	12.90	205	10.60	203	6.20	463
El Rosal	260	64	9.42	170	7.30	110	6.20	344
Lota	229	530	14.06	2,522	9.26	2,116	6.15	5,168
Buen Retiro	207	58	11.38	122	7.24	94	5.60	274
Schwager	262	466	15.11	1,877	11.47	1,548	9.29	3,891
Chiflón No. 9 and Central	188	406	13.10	1,620	9.07	775	7.64	2,801
Anita, Constancia, Fortuna	244			700	7.50	300	6.17	1,000
Amelia, Neuva, and Adolrina	231	94	13.00	160	10.24	194	9.14	448
Loreto	264	25	16.58	19	16.18	14	12.91	58
Others	252	112	11.15	59	7.51	120	6.81	291
Total	240	1,810	13.62	7,454	9.60	5,474	7.38	14,738
								9.26
								1.07

<sup>1</sup> Chile. Oficina Central de Estadística. Anuario Estadístico año 1925, Vol. VIII. Minería y Metallurgia. Santiago, 1926, pp. 24 and 33.

## Comparative Wage Rates in the United States and in Foreign Countries

THE following tabulation of wage rates, by occupation, in the United States and foreign countries, assembles in convenient form for comparison data published in the Monthly Labor Review during recent months. No attempt is made to show rates in the various countries for the same date or for the same unit of time, as the necessary information was not available.

In converting foreign wage rates to equivalent United States money the exchange rates were obtained from the Federal Reserve Board reports and the Review of Economic Statistics (Supplement) for December, 1926, published by the Harvard Economic Service (Cambridge, Mass.). In the process of conversion the foreign wage rate was multiplied by the exchange rate of the particular country on the corresponding date for which the wage rate was reported. Many foreign wage rates were reported in American money, and for these no foreign rates are given. Canadian exchange rates fluctuate so little that their wage rates were reported at par, or the same as United States money. Wage rates for England, Wales, South Africa, New Zealand, Australia, and Tasmania were reported in English money; therefore London exchange rates were used in converting the wage rates of these countries.

COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Automobile industry</i>				
Fitters, tool makers:				
France—				
Time workers.....	Feb., 1926	Hour	4.31 francs.....	\$0.16
Pieceworkers.....	do	do	4.53 francs.....	.17
United States—Tool and die makers	1925	do		.87
Lathe hands:				
France—				
Time workers.....	Feb., 1926	do	4.35 francs.....	.16
Pieceworkers.....	do	do	4.58 francs.....	.17
United States	1925	do		.76
Machine setters:				
Argentina, Buenos Aires—Mechanics	Apr. 6, 1925	Month	250 pesos.....	96.25
Belgium, Brussels—Mechanics	Oct. 15, 1925	Hour	3.75 francs.....	.17
France—				
Time workers.....	Feb., 1926	do	4.73 francs.....	.17
Pieceworkers.....	do	do	4.81 francs.....	.18
United States—Machinists	1925	do		.81
Milling-machine operators:				
France—				
Time workers.....	Feb., 1926	do	4.26 francs.....	.16
Pieceworkers.....	do	do	4.54 francs.....	.17
United States	1925	do		.74
<i>Bakeries</i>				
Bakers:				
Austria, Vienna	Sept., 1923	Week	367,223-368,881 kronen.	5.14-5.16
Belgium, Brussels	Oct. 15, 1925	Hour	3.40 francs.....	.15
Denmark, Copenhagen	3d quarter, 1924	do	180 øre.....	.31
Germany, Hamburg	Sept., 1920	Week	48 marks.....	11.43
Spain	1924	Day	9.50-11.50 pesetas.....	1.26-1.53
Tasmania	June 30, 1923	Week	95 shillings.....	23.11
United States	May, 1926	Hour		.93

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Building trades</i>				
Bricklayers:				
Argentina	Oct., 1922	Day	7.21 pesos	\$3.06
Australia—				
Melbourne	June 30, 1926	Week	123s. 9d.	30.10
Sydney	do	do	113s. 1d.	27.51
Austria, Vienna	Oct., 1924	do	587,500 kronen	8.31
Belgium, Brussels	do	do	164.40 francs	7.94
Brazil, Rio de Janeiro	do	Day	10-11½ milreis	1.08-1.24
Canada—				
Montreal	1926	Hour		1.00
Ottawa	1926	do		1.10
Quebec	1926	do		.90
Toronto	1926	do		1.13
Winnipeg	1926	do		1.35
Vancouver	1926	do		1.13
China—				
Hong Kong	Dec., 1923	Day	1 Hong Kong dollar	.53
Shansi	June, 1925	do	30-35 cents Mexican	.17-.19
Czechoslovakia, Prague	Oct., 1924	Week	220 kronen	6.57
France, Paris	do	do	192 francs	10.13
Germany, Berlin	do	do	46.42 marks	11.05
Great Britain—				
Italy—				
Milan	Oct., 1924	Week	164.40 lire	7.19
Rome	do	do	182.40 lire	7.98
Japan	1925	Day	3.33 yen	1.28
Mexico, Nayarit	Dec., 1925	Month	48 pesos	23.40
Netherlands, Amsterdam	Oct., 1924	Week	38.4 guilders	14.83
Norway, Oslo	do	do	88.8 kronen	12.61
Portugal, Lisbon	do	do	114 escudos	4.07
Spain, Madrid	do	do	52.5 pesetas	6.98
South Africa	Dec. 31, 1921	Hour	2s. 11d.-3s. 10d.	.56-.74
Sweden, Stockholm	Oct., 1924	Week	76.8 kroner	20.44
Tasmania	June 30, 1923	Hour	2s. 5d.	.55
United States	1926	do		1.57
Carpenters:				
Algeria	1924	Day	24-28 francs	1.24-1.44
Arabia	July 19, 1922	Month	120 rupees	34.78
Argentina, Buenos Aires	1922	Day	7.66 pesos	3.26
Australia—				
Melbourne	June 30, 1926	Week	121s. 11d.	20.64
Sydney	do	do	121s. 0d.	29.42
Austria, Vienna	Oct., 1924	do	617,760 kronen	8.72
Belgium	Oct., 1925	Hour	3.85 francs	.17
Brazil—				
Parahyba	1926	Day	6-10 milreis	.87-1.44
Sao Paulo	Dec., 1925	Hour	1.8 milreis	.26
Rio de Janeiro	Oct., 1924	Day	11-15 milreis	1.61-2.19
Canada—				
Montreal	1926	Hour		.63-.75
Ottawa	1926	do		.75
Quebec	1926	do		.45-.55
Toronto	1926	do		.80-.90
Winnipeg	1926	do		1.00
Vancouver	1926	do		.94
Chile	1926	Day	13.12 pesos	1.58
China—				
Hong Kong	Dec., 1923	do	1.4 Hong Kong dollars	.74
Shanghai	Mar. 15, 1923	do	0.70 Mexican dollar	.36
Shansi	June, 1925	do	30-35 cents Mexican	.17-.19
Colombia, Cartagena	1924	do		2.00-2.25
Costa Rica	do	do		2.10
Cuba, Cienfuegos	1926	do		.35
Czechoslovakia, Prague	Oct., 1924	Week	225 kronen	6.72
Denmark, Copenhagen	3d quarter, 1924	Hour	234 øre	.41
Dominican Republic	May, 1924	Day		2.00-3.00
England, London	Oct., 1924	Week	82s.	18.27
France—				
Paris	Oct., 1925	Hour	4 francs	.18
Outside Paris	do	do	3.03 francs	.13
Germany—				
Berlin	Oct., 1924	Week	46.75 marks	11.13
Hamburg	Dec., 1923	Hour	1.30 marks	.31

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Building trades—Continued</i>				
Carpenters—Continued.				
Great Britain	Dec., 1925	Hour	19.9d	\$0.40
Greece	1924	Day	51.0-56.5 drachmas	.90-.97
Haiti, Cape Haitian	Feb. 10, 1925	do		1.75
Italy—				
Milan	Feb. 1, 1926	Hour	3.99 lire	.16
Rome	Oct., 1924	Week	182.4 lire	7.98
	1925	Day	3 yen	1.28
	Dec., 1925	Month	52 pesos	25.35
	Oct., 1924	Week	38.4 guilders	14.83
Mexico, Nayarit	do	do	84 kroner	11.93
Netherlands, Amsterdam	do	do	120 escudos	4.28
Norway, Oslo	do	do	64.8 pesetas	8.62
Portugal, Lisbon	do	do	76.8 kroner	20.44
Spain, Madrid	do	do		
Sweden, Stockholm	do	do		
Switzerland	1923	Hour	1.39 francs	.25
Tasmania	June 30, 1923	do	2s. 5d	.55
Venezuela	May 3, 1924	Day		1.75
United States	1926	Hour		1.27
Electricians:				
Canada—				
Montreal	1926	do		.60-.70
Ottawa	1926	do		.80
Quebec	1926	do		.45-.55
Toronto	1926	do		.80
Winnipeg	1926	do		1.00
Vancouver	1926	do		.85-.90
China, Hongkong	Dec., 1923	Day	1.6 Hong Kong dollars	.85
Cuba, Cienfuegos	1926	do		3.50
Denmark, Copenhagen	3d quarter, 1924	Hour	167 øre	.27
Dominican Republic	May, 1926	Day		3.50-4.00
Finland	1923	Hour	4.74 marks	.13
Germany, Hamburg	1926	do	1.03 marks	.25
Greece	1924	Day	62 drachmas	1.11
Tasmania	June 30, 1923	Week	110s.	25.16
Venezuela	May 3, 1924	Day		2.75
United States	1926	Hour		1.34
Laborers:				
Austria, Vienna	Oct., 1924	Week	474,720 kronen	6.72
Belgium, Brussels	do	do	114 francs	5.48
Brazil, Rio de Janeiro	do	Day	5.5-6.5 milreis	.62-.73
Canada—				
Montreal	1926	Hour		.30-.40
Ottawa	1926	do		.45-.50
Quebec	1926	do		.30-.40
Toronto	1926	do		.35-.65
Winnipeg	1926	do		.40-.50
Vancouver	1926	do		.45-.56
China, Hong Kong	Dec., 1923	do	0.8 Hong Kong dollar	.42
Colombia, Cartagena	1924	Day		1.20
Cuba, Cienfuegos	1926	do		2.00
Czechoslovakia, Prague	Oct., 1924	Week	165 kronen	4.92
Dominican Republic	May, 1926	Day		.50-.80
France	Oct., 1925	Hour	2.08 francs	.09
Germany—				
Berlin	Oct., 1924	Week	36.96 marks	8.80
Hamburg (excavating)	Dec., 1925	Hour	0.89 mark	.21
Great Britain	Dec. 3, 1925	do	15.1d	.31
Haiti, Cape Haitien	Feb. 10, 1925	Day		.25-.30
Italy, Milan	Feb. 1, 1926	Hour	2.30 lire	.10
Jamaica	Mar. 15, 1926	Day		1.25-2.25
Netherlands, Amsterdam	Oct., 1924	Week	31.2 guilders	12.20
Norway, Oslo	do	do	79.2 kroner	11.29
Spain, Madrid	do	do	39 pesetas	5.23
Sweden, Stockholm	do	do	69.6 kroner	18.52
Tasmania	June 30, 1923	Hour	2s. 2d	.50
United States	Oct., 1926	do		.50
Painters:				
Algiers	1924	Day	18-22 francs	.92-1.13
Arabia	July 19, 1922	Month	90 rupees	26.09
Argentina, Buenos Aires	Oct., 1922	Day	7.62 pesos	3.24
Australia—				
Melbourne	June 30, 1926	Week	113s. 8d	27.66
Sydney	do	do	108s. 2d	26.32
Austria, Vienna	Oct., 1924	do	619,200 kronen	8.76
Belgium, Brussels	Oct., 1925	Hour	3.25 francs	.15

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Building trades—Continued</i>				
Painters—Continued.				
Brazil, Rio de Janeiro	Oct., 1925	Day	12-18 milreis	\$1.78-\$2.22
Canada				
Montreal	1926	Hour		.60-.70
Ottawa	1926	do		.65
Quebec	1926	do		.40-.60
Toronto	1926	do		.65-.75
Winnipeg	1926	do		.85
Vancouver	1926	do		.88
China				
Hong Kong	Dec., 1923	Day	1.2 Hong Kong dollars	.63
Shanghai	Mar., 1923	do	80-90 cents Mexican	.42-.47
Shansi	June, 1925	do	30-40 cents Mexican	.17-.22
Costa Rica	1924	do		1.80
Cuba, Cienfuegos	1926	do		3.25
Czechoslovakia, Prague	Oct., 1924	Week	270 kronen	8.07
Denmark, Copenhagen	3d quarter, 1924	Hour	200 øre	.35
Dominican Republic	May, 1926	Day		1.50-2.50
France				
Paris	Oct., 1925	Hour	4.15 francs	.18
Outside Paris	do	do	2.87 francs	.13
Germany, Hamburg	Sept., 1926	do	1.25 marks	.30
Great Britain	Dec. 31, 1925	do	19.8d	.40
Italy				
Milan	Oct., 1924	Week	175.2 lire	7.67
Rome	do	do	201.6 lire	8.82
Japan	1925	Day	2.87 yen	1.18
Netherlands, Amsterdam	Oct., 1924	Week	36 guilders	13.91
Norway, Oslo	do	do	84 kroner	11.93
Portugal, Lisbon	do	do	120 escudos	4.28
South Africa	Dec. 31, 1921	Hour	2s. 2d.-3s. 10d	.53-.93
Spain, Madrid	Oct., 1924	Week	49.2 pesetas	6.55
Sweden, Stockholm	do	do	72 kroner	19.16
Tasmania	June, 1923	Hour	2s. 5d.	.59
Venezuela	May 3, 1924	Day		1.80
United States	1926	Hour		1.31
Plasterers:				
Australia				
Melbourne	June 30, 1926	Week	123s. 9d	30.11
Sydney	do	do	108s. 4d	26.36
Austria, Vienna	Sept., 1923	do	504,960 kronen	7.07
Brazil				
Canada				
Montreal	1926	Hour		1.00-1.13
Ottawa	1926	do		.85
Quebec	1926	do		.85
Toronto	1926	do		1.25
Winnipeg	1926	do		1.25
Vancouver	1926	do		1.19
Germany, Hamburg	Dec., 1925	do	1.5 marks	.36
Great Britain	Dec. 31, 1925	do	20d	.41
Greece	1924	Day	85 drachmas	1.52
Hungary	Oct., 1924	Hour	19,000 kronen	.25
Italy, Milan	Feb. 1, 1926	do	4.19 lire	.17
Japan	1925	Day	3.26 yen	1.34
Tasmania	June 30, 1923	Hour	2s. 5d.	.55
United States	1926	do		1.00
Plumbers:				
Argentina, Buenos Aires	Oct., 1922	Day	8.50 pesos	3.61
Australia				
Melbourne	June 30, 1926	Week	121s.	29.42
Sydney	do	do	117s.	28.44
Austria, Vienna	Oct., 1924	do	459,000 kronen	6.49
Belgium, Brussels	Oct., 1925	Hour	3.45 francs	.16
Canada				
Montreal	1926	do		.70-.75
Ottawa	1926	do		.85-.90
Quebec	1926	do		.45-.60
Toronto	1926	do		1.00
Winnipeg	1926	do		1.13
Vancouver	1926	do		1.05
China, Hong Kong	Dec., 1923	Day	1.40 Hong Kong dollars	.74
Cuba, Cienfuegos	1926	do		3.50

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Building trades—Continued</i>				
Plumbers—Continued.				
Denmark, Copenhagen	3d quarter, 1924	Hour	206 øre	\$0.36
Dominican Republic	May, 1926	Day		4.00-5.00
France—				
Paris	Oct., 1925	Hour	4 francs	.18
Outside Paris	do	do	2.9 francs	.13
Germany, Hamburg	Sept., 1926	do	1.28 marks	.31
Great Britain	Dec. 31, 1925	do	19.9d.	.40
Italy, Rome	Oct., 1924	Week	144 lire	.50
Netherlands, Amsterdam	do	do	40.8 guilders	15.76
Norway, Oslo	do	do	86.4 kroner	12.27
Portugal, Lisbon	do	do	108 escudos	3.86
South Africa	Dec. 31, 1921	Hour	2s. 11d.-3s. 10d	.56-.74
Spain, Madrid	Oct., 1924	Week	46.5 pesetas	6.19
Sweden, Stockholm	do	do	60 kronor	15.97
Tasmania	June 30, 1923	Hour	2s. 0d.-2s. 9d	.44-.65
United States	1926	do		1.38
Sheet-metal workers:				
Canada—				
Montreal	1926	do		.50-.70
Ottawa	1926	do		.83
Quebec	1926	do		.45-.55
Toronto	1926	do		.50-.90
Winnipeg	1926	do		.60-.90
Vancouver	1926	do		1.00
Tasmania	June 30, 1923	do	2s. 0d.-2s. 2½d	.44-.48
Venezuela	May 3, 1924	Day		3.00
United States	1926	Hour		1.29
Stonemasons:				
Algeria	1924	Day	25-28 francs	1.31-1.46
Arabia	July 19, 1922	Month	90 rupees	26.09
Australia	June 30, 1926	Week	120s	29.32
Austria, Vienna	Sept., 1923	do	413,700 kronen	5.79
Belgium, Brussels	Oct., 1925	Hour	3.6 francs	.16
China—				
Hong Kong	Dec., 1923	Day	1 Hong Kong dollar	.53
Shanghai	Mar., 1923	do	0.7 Mexican dollar	.36
Shansi	June, 1925	do	30-40 cents Mexican	.17-.22
Cuba, Cienfuegos	1926	do		3.50
Denmark, Copenhagen	3d quarter, 1924	Hour	269 øre	.44
Dominican Republic	May, 1926	Day		1.25-3.00
France—				
Paris	Oct., 1925	Hour	4 francs	.18
Outside Paris	do	do	2.98 francs	.13
Germany, Hamburg	Sept., 1926	do	1.28 marks	.31
Great Britain	Dec. 31, 1925	do	20d.	.41
Greece	1924	Day	79-85 drachmas	1.41-1.52
Haiti, Cape Haitien	Feb. 10, 1925	do		1.75
Italy, Milan	Feb. 1, 1926	Hour	3.82 lire	.15
Japan	June, 1925	Day	3.51 yen	1.43
Netherlands, Amsterdam	July, 1923	do	7.23 guilders	2.83
Norway	Nov., 1922	Hour	1.70 kroner	.30
South Africa	Dec. 31, 1921	do	2s. 11d.-3s. 10d	.56-.74
Spain	June, 1924	Day	12 pesetas	1.02
Sweden	1922	Week	57 kronor	14.92
Venezuela	May 3, 1924	Day		1.60
United States	1926	Hour		1.55
Structural-iron workers:				
China	June, 1925	Day	30-35 c. Mexican	.17-.19
Costa Rica	1924	do		2.50
France	Feb., 1926	Hour	4.25 francs	.17
United States	1926	do		1.36
All workers:				
Australia	Dec. 31, 1925	Week	108s. 5d.	26.29
Germany—				
Skilled	Oct., 1925	Hour	1.157 marks	.28
Unskilled	do	do	0.946 mark	.23
Poland—				
Skilled	May, 1923	Day	50,912 marks	.71
Unskilled	do	do	40,840 marks	.57
United States	May 15, 1926	Hour		1.28

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Clothing industry, men's</i>				
Cutters:				
Australia—				
Melbourne (ready made)	June 30, 1926	Week	104s. 6d	\$25.42
Melbourne (custom)	do	do	114s. 6d	27.86
Sydney (ready made)	do	do	100s. 0d	24.33
Sydney (custom)	do	do	110s. 0d	26.76
Austria, Vienna	Sept., 1923	do	622,300 kronen	8.71
Denmark, Copenhagen	3d quarter, 1924	Hour	193 øre	.31
Greece	1924	Day	17-34 drachmas	.30-.61
United States	1926	Hour		1.12
Pressers:				
Argentina, Buenos Aires	Feb. 5, 1927	Day	5.85 pesos	2.52
Australia—				
Melbourne	June 30, 1926	Week	104s. 6d	25.42
Sydney	do	do	104s. 6d	25.42
Austria, Vienna	Sept., 1923	do	265,776 kronen	3.72
Belgium, Brussels	Oct., 1925	Hour	1.4 francs	.06
United States	1926	do		.93
Tailors:				
Arabia	July 19, 1922	Month	60 rupees	17.39
Argentina, Buenos Aires	Feb. 5, 1927	Day	5.60-7.70 pesos	2.45-3.31
Australia, Sydney	June 30, 1926	Week	104s. 6d	25.42
Austria, Vienna	Sept., 1923	do	342,250 - 483,210 kronen	4.70-6.76
Belgium, Brussels	Oct., 1925	Hour	3.2 francs	.15
China, Shansi	1925	Day	40-45 cents Mexican	.22-.25
Denmark, Copenhagen	3d quarter, 1924	Hour	168 øre	.27
France—				
Paris	Oct., 1925	do	4.5 francs	.20
Outside Paris	do	do	2.78 francs	.12
Germany, Hamburg	Oct., 1926	do	0.98 mark	.23
Greece	1924	Day	56.5-85 drachmas	1.01-1.52
Haiti, Cape Haitien	Feb., 1925	Month		5.00-25.00
Japan (European dress)	1925	Day	2.57 yen	1.05
Tasmania	June 30, 1923	Week	65-90s.	14.87-20.58
United States (bushealers and tailors)	1926	Hour		.86
<i>Coal mining</i>				
Drivers:				
Canada—				
Alberta	Sept., 1926	Day		4.70-5.25
Nova Scotia	do	do		3.60
Vancouver Island	do	do		4.13
Great Britain	Mar. 15, 1923	do	7s. 6d	1.72
Netherlands	Apr., 1924	do	4.37 florins	1.63
United States (anthracite)	1924	do		5.46
United States (bituminous)	1924	do		6.12
Laborers:				
Alaska (underground)	1925	do		7.80
Alaska (surface)	1925	do		5.50
Canada—				
Alberta (surface)	1926	do		4.00-4.20
Alberta (underground)	1926	do		4.25-4.67
Nova Scotia (surface)	1926	do		3.25
Nova Scotia (underground)	1926	do		3.35
Vancouver (surface)	1926	do		3.76
Vancouver (underground)	1926	do		3.97
United States (surface)	1924	Hour		.58
United States (underground)	1924	do		.66
Miners:				
Alaska	1925	Day		8.00
Australia	June, 1921	Week	105s. 8d	20.35
Canada—				
Alberta (hand)	Sept., 1926	Day		5.00-5.57
Nova Scotia (hand)	do	do		4.15
Vancouver (hand)	do	do		4.52
Alberta (machine)	do	do		5.65-7.00
Vancouver (machine)	do	do		4.81
Alberta (contract)	do	do		7.00
Nova Scotia (contract)	do	do		6.35
Vancouver (contract)	do	do		6.50
China, Shansi	June, 1925	do	40 cents Mexican	.22
Great Britain—				
Derbyshire (top hard seams)	Mar. 15, 1923	do	11s. 7d	2.65
Derbyshire (other seams)	do	do	11s. 5d	2.61
South Wales and Monmouth	do	do	8s. 10d	2.02

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Coal mining—Continued</i>				
Miners—Continued.				
India	1920	Month	12.24 rupees	\$3.97
Netherlands	Apr., 1924	Day	6.95 florins	2.38
New Zealand	1922	Week	104s. 1¾d.	23.04
Spain	June, 1924	Day	12 pesetas	1.02
South Africa—				
Natal	Jan., 1922	do	23s.	5.09
Transvaal	do	do	23s.	5.54
United States, anthracite (contract)	1924	do		9.07
United States, bituminous (pick)	1924	do		6.26
United States, bituminous (machine)	1924	do		9.65
Motormen:				
Netherlands	Apr., 1924	do	5.18-5.47 florins	1.02-2.03
Canada, western	Oct., 1924	do		6.31
United States (anthracite)	1924	do		6.60
United States (bituminous)	1924	do		6.46
Timbermen:				
Alaska	1925	do		8.60
Canada, western	1924	do		6.86
Great Britain	Mar. 15, 1923	do	108. 1d.-108. 4d	2.31-2.36
Japan	May, 1922	do	1.62-2.25 yen	.77-1.08
Netherlands	Apr., 1924	do	5.78 florins	2.14
United States (anthracite)	1924	do		6.38
<i>Farming</i>				
Farm laborers:				
Australia	Dec. 31, 1925	Week	87s. 4d.	19.78
Brazil, Parahyba	1926	Day	4-5 milreis	.58-.72
Canada—				
Males	1925	Year		641.00
Females	1925	do		462.00
China, Shanghai	Mar. 15, 1923	Month	6-8 Mexican dollars. <sup>1</sup>	1.3.12-4.16
Denmark	1924-25	Day	5.84 kroner	1.10
Finland—				
Males	1923	Year	7,508 marks	201.36
Females	1923	do	4,803 marks	128.82
France, Department of Seine	1924	Day	20 francs	1.05
Germany, East Prussia—				
Males	Dec. 15, 1925	Hour	0.3019 mark	.07
Females	do	do	0.2873 mark	.07
Great Britain	Dec. 31, 1925	Week	31s. 5d.	7.64
Guatamala	1924	Day		1.30
Hawaii	1924	do		2.50
Jamaica	1925	do		.50
Japan, Osaka	1924	do	2 yen	.82
Lithuania—				
Males	1924	do	3.30 litas <sup>1</sup>	1.33
Females	1924	do	2.20 litas <sup>1</sup>	1.22
Mexico—				
Nayarit	Dec., 1925	Month	23 pesos	11.21
Federal district	Mar., 1926	Week	36 pesos	17.48
State of Jalisco	do	do	22½ pesos	10.93
State of Mexico	do	do	24 pesos	11.65
Norway—				
Males	1924-25	Day	8.06 kroner	1.28
Females	1924-25	do	5.18 kroner	.82
Sweden—				
Males	1924	Year	1,164 kroner	308.69
Females	1924	do	933 kroner	247.43
United States	Jan., 1927	Day		2.36
Do	do	Month		47.07
<i>Furniture</i>				
Cabinetmakers:		*		
Australia—				
Melbourne	June 30, 1926	Week	108s. 6d.	26.40
Sydney	do	do	101s. 9d.	24.57
Austria, Vienna	Oct., 1924	do	473,184 kroner	6.70
Belgium, Brussels	Oct., 1925	Hour	4 francs	.18
Brazil, Sao Paulo	Dec., 1925	do	1.8 milreis	.26
Canada, Ottawa	Oct., 1924	Week		27.60
China	June, 1925	Day	30-40 c. Mexican	17-.22
Czechoslovakia, Prague	do	Week	250 kroner	7.41
Denmark, Copenhagen	3d quarter, 1924	Hour	173 øre	.28
England, London	Oct. 1924	Week	84s.	18.85

<sup>1</sup> With board.

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Furniture—Continued</i>				
<i>Cabinetmakers—Continued.</i>				
France—				
Paris.....	Oct., 1925.....	Hour.....	4 francs.....	\$0.18.....
Outside Paris.....	do.....	do.....	3.05 francs.....	.14.....
Germany, Hamburg.....	1926.....	do.....	1.03 marks.....	.25.....
Great Britain.....	Dec., 31, 1925.....	Week.....	74s. 6d.....	18.13.....
Hungary.....	Oct. 1, 1924.....	Hour.....	8,000-15,000 kroner.....	.10-.20.....
Italy, Milan.....	Feb., 1926.....	do.....	4.17 lire.....	.17.....
Japan, Osaka.....	1924.....	Day.....	3 yen.....	.24.....
Luxemburg.....	Oct., 1, 1924.....	Hour.....	2.5-3.75 francs.....	.11-.17.....
Netherlands, Amsterdam.....	Oct., 1924.....	Week.....	32.64 guilders.....	12.76.....
Norway, Oslo.....	do.....	do.....	88.8 kroner.....	12.66.....
Portugal, Lisbon.....	do.....	do.....	150 escudos.....	5.90.....
Spain, Madrid.....	do.....	do.....	63 pesetas.....	8.44.....
Sweden, Stockholm.....	do.....	do.....	57.6 kronor.....	15.33.....
Switzerland.....	1923.....	Hour.....	1.5 francs.....	.27.....
Tasmania.....	June 30, 1923.....	Week.....	93s. 6d.....	21.38.....
Yugoslavia.....	Oct., 1924.....	Hour.....	8-16 dinars.....	.11-.23.....
United States, Lowell, Mass.....	1925.....	do.....		.80.....
<i>Upholsterers:</i>				
Belgium, Brussels.....	Oct. 15, 1925.....	do.....	3 francs.....	.14.....
Brazil, Sao Paulo.....	Dec., 1925.....	do.....	2.5 milreis.....	.35.....
Canada (average of 10 samples).....	1926.....	do.....		.50.....
France, outside Paris.....	Oct., 1925.....	do.....	2.98 francs.....	.13.....
Germany, Hamburg.....	1926.....	do.....	1.17 marks.....	.28.....
Great Britain.....	Dec. 31, 1925.....	Week.....	74s. 4d.....	18.09.....
United States.....	1925.....	Hour.....		1.00-1.15.....
<i>Granite and stone industry</i>				
<i>Stonecutters:</i>				
Brazil, Rio de Janeiro.....	Oct., 1924.....	Day.....	15-18 milreis.....	1.61-1.94.....
Canada—				
Montreal.....	1926.....	Hour.....		.75.....
Ottawa.....	1926.....	do.....		1.00.....
Quebec.....	1926.....	do.....		.45-.60.....
Toronto.....	1926.....	do.....		1.00.....
Winnipeg.....	1926.....	do.....		1.10-1.13.....
Vancouver.....	1926.....	do.....		1.00.....
China, Shanghai.....	Mar. 15, 1923.....	Day.....	1.20 Mexican dollars.....	.62.....
Denmark, Copenhagen.....	3d quarter, 1924.....	Hour.....	210 øre.....	.37.....
France—				
Paris.....	Oct., 1923.....	do.....	4.5 francs.....	.20.....
Outside Paris.....	do.....	do.....	3.18 francs.....	.14.....
Germany, Hamburg.....	Dec., 1925.....	do.....	1.52 marks.....	.36.....
Japan.....	1925.....	Day.....	3.46 yen.....	1.42.....
United States.....	May, 1926.....	Hour.....		1.40.....
<i>Iron and steel industry</i>				
<i>Blast furnaces:</i>				
Blowers—				
Germany.....	Spring, 1926.....	Day.....	7.40-9.80 marks.....	1.76-2.33.....
United States.....	1926.....	Hour.....		.90.....
Blowing engineers—				
Great Britain.....	Spring, 1926.....	Week.....	£3 19s. 11d.....	19.44.....
United States.....	1926.....	Hour.....		.66.....
Chargers (top fillers)—				
Great Britain.....	Spring, 1926.....	Week.....	£4 13s. 7d.-£5 10s. 11d.....	22.78-26.09.....
United States.....	1926.....	Hour.....		.50.....
Keepers—				
Germany.....	Spring, 1926.....	Day.....	6.65-8.70 marks.....	1.58-2.07.....
Great Britain.....	do.....	Week.....	£5 8s. 5d.-£5 14s. 4d.....	26.38-27.83.....
United States.....	1926.....	Hour.....		.58.....
Laborers—				
Great Britain.....	Spring, 1926.....	Week.....	£2 13s. 1d.....	12.91.....
United States.....	1926.....	Hour.....		.39.....
Skip operators—				
Germany.....	Spring, 1926.....	Day.....	6.80-8.72 marks.....	1.62-2.08.....
United States.....	1926.....	Hour.....		.55.....
Stockers—				
Germany.....	Spring, 1926.....	Day.....	5.50-6.64 marks.....	1.31-1.58.....
United States.....	1926.....	Hour.....		.47.....

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Iron and steel industry—Continued</i>				
Bessemer converters:				
Blowers—				
Germany (Thomas furnaces).....	Spring, 1926.....	Day.....	9.30-12.20 marks.....	\$2.21-\$2.90
United States.....	1926.....	Hour.....		.36
Laborers—				
Germany (Thomas furnaces).....	Spring, 1926.....	Day.....	5.50-6.80 marks.....	1.31-1.62
United States.....	1926.....	Hour.....		.44
Regulators—				
Germany (Thomas furnaces).....	Spring, 1926.....	Day.....	8.10-12.50 marks.....	1.93-2.98
United States.....	1926.....	Hour.....		.95
Open-hearth furnaces:				
Laborers—				
Great Britain.....	Spring, 1926.....	Day.....	6s. 9d.....	1.64
United States.....	1926.....	Hour.....		.43
Melters—				
Chile.....	1926.....	Day.....	12 pesos.....	1.45
Germany (Martin furnaces).....	Spring, 1926.....	do.....	9.12-11.50 marks.....	2.17-2.74
Great Britain.....	do.....	do.....	36s. 11d.....	8.98
United States (first helpers).....	1926.....	Hour.....		.17
Pourers—				
Great Britain.....	Spring, 1926.....	Day.....	17s. 2d.....	4.18
United States.....	1926.....	Hour.....		.89
Rolling mills:				
Heaters—				
Germany.....	Spring, 1926.....	Day.....	7.60-19.20 marks.....	1.81-4.57
Great Britain.....	do.....	Week.....	£5 7s. 7.1d.....	26.18
United States (bar mills).....	1926.....	Hour.....		.95
Laborers—				
Germany.....	Spring, 1926.....	Day.....	5.90-8.70 marks.....	1.40-2.07
Great Britain.....	do.....	do.....	6s. 7½d.-8s. 9d.....	1.61-1.64
United States (bar mills).....	1926.....	Hour.....		.41
Rollers—				
Germany.....	Spring, 1926.....	Day.....	9.20-23.20 marks.....	2.19-5.52
Great Britain.....	do.....	Week.....	£6 15s. 8d.....	33.01
United States (bar mills).....	1926.....	Hour.....		.70
Roughers—				
Great Britain.....	Spring, 1926.....	Week.....	£3 5s. 10½d.....	16.03
United States (bar mills).....	1926.....	Hour.....		.35
Puddling mills:				
Puddlers—				
England, Manchester.....	Spring, 1926.....	Day.....	15s. 10d.....	3.85
United States.....	1926.....	Hour.....		.77
Puddlers' helpers—				
England, Manchester.....	Spring, 1926.....	Day.....	9s. 5½d.....	2.31
United States.....	1926.....	Hour.....		.65
Tin mills:				
Assorters—				
Wales, Swansea—Males.....	Spring, 1926.....	Day.....	20s. 1½d.....	4.89
United States—Females.....	1926.....	Hour.....		.38
Doublers—				
Wales, Swansea.....	Spring, 1926.....	Day.....	18s. 5½d.....	4.49
United States.....	1926.....	Hour.....		.79
Laborers—				
Wales, Swansea.....	Spring, 1926.....	Day.....	7s. 4½d.....	1.79
United States.....	1926.....	Hour.....		.43
Rollers—				
Wales, Swansea.....	Spring, 1926.....	Day.....	22s. 11d.....	5.58
United States.....	1926.....	Hour.....		.64
Tinners—				
Wales, Swansea.....	Spring, 1926.....	Day.....	16s. 6d.....	4.01
United States.....	1926.....	Hour.....		.84
Shearmen—				
Wales, Swansea.....	Spring, 1926.....	Day.....	21s. 10½d.....	5.32
United States.....	1926.....	Hour.....		1.02
<i>Metal trades</i>				
Blacksmiths:				
Arabia.....	July 19, 1922.....	Month.....	120 rupees.....	34.78
Australia—				
Melbourne.....	June 30, 1926.....	Week.....	112s. 6d.....	27.37
Sydney.....	do.....	do.....	114s. 6d.....	27.86
Austria, Vienna.....	Sept., 1923.....	do.....	303,792 kronen.....	5.51
Belgium, Brussels.....	Oct., 1925.....	Hour.....	4 francs.....	.18
Canada—				
Montreal.....	1926.....	do.....		.53-.70
Ottawa.....	1926.....	do.....		.51-.65
Quebec.....	1926.....	do.....		.50-.60
Toronto.....	1926.....	do.....		.50-.65
Winnipeg.....	1926.....	do.....		.60-.80
Vancouver.....	1926.....	do.....		.75-.88

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Metal trades—Continued</i>				
Blacksmiths—Continued.				
Chile	1926	Day	13.24 pesos	\$1.60
China—				
Hong Kong	Dec., 1923	do	1.60 Hong Kong dollars	.85
Shanghai	Mar., 1923	do	1.5 Mexican dollars	.52-.78
Costa Rica	1924	do		3.50
Denmark, Copenhagen	3d quarter, 1924	Hour	190 øre	.31
Finland	1923	do	5.76 marks	.15
France—				
Time workers	Feb., 1926	do	4.15 francs	.15
Pieceworkers	do	do	4.51 francs	.17
Greece	1924	Day	62 drachmas	1.11
Japan	1925	do	2.2 yen	.90
Spain	1924	do	4-8 pesetas	.43-.86
United States	1925	Hour		.72
Boilermakers:				
Australia—				
Melbourne	June 30, 1926	Week	112s. 6d	27.34
Sydney	do	do	119s. 6d	29.04
Canada—				
Montreal	1926	Hour		.50-.75
Ottawa	1926	do		.61-.75
Quebec	1926	do		.40-.50
Toronto	1926	do		.60-.75
Winnipeg	1926	do		.60-.72
Vancouver	1926	do		.75-.88
Chile	1926	Day	14.68 pesos	1.77
China, Hong Kong	Dec., 1923	do	1.60 Hong Kong dollars	.85
Costa Rica	1924	do		6.50
Finland	1923	Hour	6.526 marks	.18
United States (average, 9 U. S. naval stations)	1927	do		.86
United States (machine shops)	1925	do		.72
Coppersmiths:				
Australia—				
Melbourne	June 30, 1926	Week	112s. 6d	27.37
Sydney	do	do	114s. 6d	27.86
Belgium, Brussels	Aug., 1924	Hour	3.00-3.75 francs	.15-.19
China, Hong Kong	Dec., 1923	Day	1.60 Hong Kong dollars	.85
Costa Rica	1924	do		4.00
Denmark, Copenhagen	3d quarter, 1924	Hour	213 øre	.35
Finland	1923	do	6.722 marks	.18
France, outside Paris	Oct., 1925	do	3.03 francs	.13
Germany, Hamburg	Sept., 1926	do	1.02 marks	.24
Greece	1924	Day	62 drachmas	1.11
Venezuela	May 3, 1924	do		3.00
United States (average, 9 U. S. naval stations)	1927	Hour		.90
Coremakers:				
Australia—				
Melbourne	June 30, 1926	Week	97s. 6d-117s. 6d	23.72-28.50
Sydney	do	do	109s. 6d	26.64
France—				
Time workers	Feb., 1926	Hour	4.00 francs	.15
Pieceworkers	do	do	4.75 francs	.18
Germany	Spring, 1926	Day	7.5-11 marks	1.70-2.62
United States	1925	Hour		.73
Laborers:				
Australia, Sydney	1924	Week	85s	18.78
Austria, Vienna	1924	do	340,000 kronen	4.81
Belgium, Brussels	1924	do	109.92 francs	5.10
Canada, Ottawa	1924	do		19.20
Czechoslovakia, Prague	1924	do	160 kronen	4.73
Denmark	3d quarter, 1924	Hour	148 øre	.24
France—				
Males, time workers	Feb., 1926	do	2.76 francs	.10
Male, pieceworkers	do	do	2.92 francs	.11
Females, time workers	do	do	1.93 francs	.07
Females, pieceworkers	do	do	2.26 francs	.08
Germany	1926	Day	5.5-7.5 marks	1.31-1.79
Great Britain	Dec. 31, 1925	Week	40s. 1d	.75
Italy, Milan	Feb., 1926	Hour	2.72 lire	.11
Netherlands, Amsterdam	1924	Week	23.52 guilders	8.90

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Metal trades—Continued</i>				
Laborers—Continued.				
Norway, Oslo	1924	Week	63.84 kroner	\$8.90
Spain, Madrid	1924	do	45 pesetas	.60
Sweden, Stockholm	1924	do	36 kronor	.55
Tasmania	Jan. 30, 1923	Day	12s. 6d.-13s. 9d	2.86-3.14
United States	Jan., 1927	Hour		.39
Lathe hands:				
Belgium, Brussels	Oct., 1925	do	4 francs	.18
France—	Feb., 1926	do	4.17 francs	.15
Time workers	do	do	4.52 francs	.17
Pieceworkers	do	do	3.62 lire	.15
Italy, Milan	1925	Day	2.29 yen	.04
Japan	1925	Hour		
United States—	1925	do		.65
Turret	1925	Hour		.66
Engine	1925	do		
Machinists:				
Australia, Sydney	Oct., 1924	Week	110s	24.68
Austria, Vienna	Sept., 1923	do	380,544 kronen	5.33
Belgium, Brussels	Oct., 1924	do	144.96 francs	6.96
Brazil, Sao Paulo	Dec., 1925	Hour	1.8 milreis	.26
Canada—				
Montreal	1926	do		.50-.75
Ottawa	1926	do		.50-.65
Quebec	1926	do		.40-.55
Toronto	1926	do		.50-.70
Winnipeg	1926	do		.60-.80
Vancouver	1926	do		.75-.81
Chile—Mechanics	1926	Day	13.04 pesos	1.37
China—				
Hong Kong	Dec., 1923	do	1.6 Hong Kong dollars	.85
Shanghai	do	Month	30-40 Mexican dollars	15.60-20.81
Colombia, Cartagena—Mechanics	1924	Day		2.00
Costa Rica	1924	do		4.50
Czechoslovakia, Prague	Oct., 1924	Week	260 kronen	7.75
Denmark, Copenhagen	3d quarter, 1924	Hour	190 øre	.31
France—				
Time workers	Feb., 1926	do	3.98 francs	.15
Pieceworkers	do	do	4.37 francs	.16
Germany, Berlin	Oct., 1924	Week	42.24 marks	10.05
Great Britain—Fitters and turners	Dec. 31, 1925	do	56s. 6d	13.75
Italy, Milan	Feb. 1, 1926	Hour	3.36 lire	.14
Netherlands, Amsterdam	Oct., 1924	Week	32.16 guilders	12.57
Norway, Oslo	do	do	76.32 kroner	10.88
Spain, Madrid	do	do	72 pesetas	.98
Sweden, Stockholm	do	do	42.24 kronor	11.24
Venezuela—Fitters	May 3, 1924	Month		110.00
United States	1925	Hour		.70
Milling-machine operators:				
France—				
Time workers	Feb., 1926	do	4.10 francs	.15
Pieceworkers	do	do	4.43 francs	.16
United States	1925	do		.05
Molders:				
Australia—				
Melbourne	June 30, 1926	Week	97s. 6d.-117s. 6d	23.72-28.50
Sydney	do	do	105s. 6d.-119s. 6d	25.67-29.07
Belgium, Brussels	Oct., 1925	Hour	3 francs	.14
Canada—				
Montreal	1926	do		.60-.75
Ottawa	1926	do		.50-.60
Quebec	1926	do		.38-.57
Toronto	1926	do		.50-.70
Winnipeg	1926	do		.55-.70
Vancouver	1926	do		.75-.81
Costa Rica	1924	Day		3.00
Czechoslovakia, Prague	Oct., 1924	Week	265 kronen	7.83
Denmark, Copenhagen	3d quarter, 1924	Hour	274 øre	.34
Finland	1923	do	6.417 marks	.17
France—				
Time workers	Feb., 1926	do	4.18 francs	.15
Pieceworkers	do	do	5.01 francs	.18
Germany—	1926	Day	8.2-11.5 marks	1.95-2.74
Great Britain	Dec. 31, 1925	Week	60s.	14.60

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Metal trades—Continued</i>				
Molders—Continued.				
Italy—				
Milan	Oct., 1924	Week	143.7 lire	\$6.25
Rome	do	do	153.6 lire	.68
Japan—Founders	1925	Day	2.2 yen	.90
Netherlands, Amsterdam	Oct., 1924	Week	27.84 guilders	10.89
Norway, Oslo	do	do	76.32 kroner	10.88
Spain, Madrid	do	do	72 pesetas	9.58
Sweden, Stockholm	do	do	42.24 kronor	11.24
United States—				
Hand, bench	1925	Hour		.73
Hand, floor	1925	do		.80
Machine	1925	do		.73
Patternmakers:				
Australia—				
Melbourne	June 30, 1926	Week	12ls. 6d	29.56
Sydney	do	do	123s. 6d	30.05
Belgium, Brussels	Oct., 1924	do	180 francs	8.65
Canada, Ottawa	do	do		33.60
China, Hong Kong	Dec., 1923	Day	1.8 Hong Kong dollars	.95
Costa Rica	1924	do		2.90
Czechoslovakia, Prague	Oct., 1924	Week	310 kronen	9.24
Finland	1923	Hour	5.757 marks	.15
France—				
Time workers	Feb., 1926	do	4.80 francs	.18
Pieceworkers	do	do	5.10 francs	.19
Germany, Berlin	Oct., 1924	Week	42.24 marks	10.05
Great Britain	Dec. 31, 1925	do	60s. 11d	14.82
Italy, Milan	Feb. 1, 1926	Hour	3.50 lire	.15
Japan	1925	Day	2.36 yen	.97
Netherlands, Amsterdam	Oct., 1924	Week	32.16 guilders	12.57
Norway, Oslo	do	do	76.32 kroner	10.88
Spain, Madrid	do	do	72 pesetas	9.65
Sweden, Stockholm	do	do	42.24 kronor	11.28
Yugoslavia	do	Hour	10-16 dinars	14.23
United States	1925	do		.80
Toolmakers:				
France—				
Time workers	Feb., 1926	do	4.2 francs	.15
Pieceworkers	do	do	4.54 francs	.17
United States	1925	do		.73
<i>Printing and bookbinding</i>				
Bookbinders:				
Australia, Sydney	Oct., 1924	Week	9s	21.31
Austria, Vienna	do	do	421,047 kronen	5.96
Belgium, Brussels	do	do	169 francs	8.12
Canada—				
Montreal	1926	do		36.00
Ottawa	1926	do		34.00
Quebec	1926	do		26.50
Toronto	1926	do		36.00
Winnipeg	1926	do		38.00
Vancouver	1926	do		42.00
Czechoslovakia, Prague	Oct., 1924	do	210 kronen	6.26
Denmark, Copenhagen—				
Males	3d quarter, 1924	Hour	199 øre	.32
Females	do	do	106 øre	.17
France—				
Paris	Oct., 1925	do	3.85 francs	.17
Outside Paris	do	do	2.84 francs	.13
Germany, Hamburg—				
Males	Dec., 1925	do	1.00 mark	.24
Females	do	do	0.61 mark	.15
Great Britain	Dec. 31, 1925	Week	73s. 4d	17.84
Italy, Milan—				
Males	Feb. 1, 1926	Hour	5.12 lire	.21
Females	do	do	2.86 lire	.12
Japan	1925	Day	2.1 yen	.36
Netherlands, Amsterdam	Oct., 1924	Week	36 guilders	14.07
Norway, Oslo	do	do	91 kroner	12.98
Portugal, Lisbon	do	do	168 escudos	6.61
South Africa	Dec. 31, 1921	do	138s. 6d.-170s. 6d	26.68-32.84
Spain, Madrid	Oct., 1924	do	43.5 pesetas	5.83
Sweden, Stockholm	do	do	42.8 kronor	14.05
United States	May, 1926	Hour		.98

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Printing and bookbinding—Continued</i>				
Compositors, hand, book, and job:				
Australia—				
Melbourne.....	June 30, 1926.....	Week.....	112s.....	\$27.25
Sydney.....	do.....	do.....	112s.....	27.25
Austria, Vienna.....	Oct., 1924.....	do.....	513.188 kronen.....	7.26
Belgium, Brussels.....	do.....	do.....	172 francs.....	8.26
Canada—				
Montreal.....	1926.....	do.....		36.00
Ottawa.....	1926.....	do.....		35.00-40.00
Quebec.....	1926.....	do.....		29.00
Toronto.....	1926.....	do.....		35.20-36.00
Winnipeg.....	1926.....	do.....		39.60
Vancouver.....	1926.....	do.....		42.00
China.....	June, 1925.....	Day.....	30-40 cents.....	.17-.22
France—				
Paris.....	Oct., 1925.....	Hour.....	4.55 francs.....	.20
Outside Paris.....	do.....	do.....	2.98 francs.....	.13
Germany, Hamburg.....	Dec., 1925.....	do.....	1 mark.....	.24
Great Britain.....	Dec. 31, 1925.....	Week.....	73s. 10d.....	17.97
Italy, Milan.....	Feb. 1, 1926.....	Hour.....	5.12 lire.....	.21
Japan.....	1925.....	Day.....	2.26 yen.....	.03
Netherlands, Amsterdam.....	Oct., 1924.....	Week.....	36 guilders.....	14.08
Norway, Oslo.....	do.....	do.....	90 kroner.....	12.83
Portugal, Lisbon.....	do.....	do.....	147 escudos.....	5.78
South Africa.....	Dec. 31, 1921.....	do.....	138s. 6d.-170s. 6d.....	26.68-32.84
Spain, Madrid.....	Oct., 1924.....	do.....	84 pesetas.....	11.26
Sweden, Stockholm.....	do.....	do.....	56.45 kronor.....	15.02
United States.....	May, 1926.....	Hour.....		1.00
Compositors, machine, book and job:				
Argentina, Buenos Aires (linotype).....	1925.....	Month.....	320 pesos.....	123.20
Australia—				
Melbourne (linotype).....	June 30, 1926.....	Week.....	126s.....	30.66
Sydney (linotype).....	do.....	do.....	124s.....	30.17
Austria, Vienna.....	Oct., 1924.....	do.....	590.166 kronen.....	8.35
Belgium, Brussels.....	do.....	do.....	184 francs.....	8.84
Canada—				
Montreal.....	1926.....	do.....		36.00
Ottawa.....	1926.....	do.....		35.00-40.00
Quebec.....	1926.....	do.....		29.00
Toronto.....	1926.....	do.....		35.20-36.00
Winnipeg.....	1926.....	do.....		39.60
Vancouver.....	1926.....	do.....		42.00
Czechoslovakia, Prague.....	Oct., 1924.....	do.....	235 kronen.....	8.50
England, London.....	do.....	do.....	96s.....	21.54
France, Paris.....	do.....	do.....	246.85 francs.....	12.91
Germany, Berlin.....	do.....	do.....	38.64 marks.....	9.20
Italy—				
Milan (linotype).....	Feb. 1, 1926.....	Hour.....	5.58 lire.....	.23
Milan (monotype).....	do.....	do.....	5.50 lire.....	.22
Netherlands, Amsterdam.....	Oct., 1924.....	Week.....	40.32 guilders.....	15.77
Norway, Oslo.....	do.....	do.....	114 kroner.....	16.26
South Africa.....	Dec., 1921.....	do.....	138s. 6d.-170s. 6d.....	26.68-32.84
Spain, Madrid.....	Oct., 1924.....	do.....	84 pesetas.....	11.26
Sweden, Stockholm.....	do.....	do.....	61.9 kronor.....	16.47
United States—Time workers.....	May, 1926.....	Hour.....		1.12
Pressmen:				
Canada—				
Montreal.....	1926.....	Week.....		36.00
Ottawa.....	1926.....	do.....		35.00-38.00
Quebec.....	1926.....	do.....		27.00
Toronto.....	1926.....	do.....		36.00
Winnipeg.....	1926.....	do.....		39.60
Vancouver.....	1926.....	do.....		42.00
Italy, Milan.....	Feb. 1, 1926.....	Hour.....	5.68 lire.....	.21
Spain.....	1924.....	Day.....	12.25 pesetas.....	1.63
United States (cylinder presses).....	May, 1926.....	Hour.....		1.12
United States (platen presses).....	do.....	do.....		.93
All workers:				
Australia.....	Dec. 31, 1925.....	Week.....	100s. 6d.....	26.55
Germany—				
Skilled workers.....	Oct., 1925.....	Hour.....	0.959 mark.....	.23
Unskilled workers.....	do.....	do.....	0.837 mark.....	.20
United States.....	May, 1926.....	do.....		1.16

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Pottery industry</i>				
Casters, male:				
England	Dec., 1925	Hour	1s. 4½d.	.33
United States	1925	do		.90
Dippers, male:				
England	Dec., 1925	do	1s. 9½d.	.44
United States	1925			1.23
Dish makers, male:				
England	Dec., 1925	do	1s. 6½d.	.38
United States	1925	do		.81
Gilders:				
England—				
Males	Dec., 1925	do	1s. 2d.	.28
Females	do		8½d.	.17
United States—				
Males	1925	do		.76
Females	1925	do		.53
Handlers, male:				
England	Dec., 1925	do	1s. 3½d.	.32
United States	1925	do		.96
Jigermen:				
England—				
Plate makers	Dec., 1925	do	1s. 6½d.	.37
Saucer makers	do	do	1s. 4½d.	.34
Hand basin and chamber makers	do	do	1s. 11½d.	.48
Cup and bowl makers	do	do	1s. 6d.	.37
Jiggers and jollers	do	do	1s. 9½d.	.44
United States	1925	do		.90
Kilm placers:				
England—				
Glost	Dec., 1925	do	1s. 7d.	.39
Bisque	do	do	1s. 6½d.	.37
United States—				
Glost	1925	do		1.04
Bisque	1925	do		1.05
Mold makers, male:				
England	Dec., 1925	do	1s. 8d.	.41
United States	1925	do		1.06
Packers, male:				
England	Dec., 1925	do	1s. 4d.	.32
United States	1925	do		.85
Pressmen:				
England	Dec., 1925	do	1s. 5d.	.35
United States	1925	do		.65
Printers, male:				
England	Dec., 1925	do	1s. 4½d.	.33
United States	1925	do		.69
Sagger makers, male:				
England	Dec., 1925	do	1s. 6d.	.37
United States	1925	do		.96
Slipmakers, male:				
England	Dec., 1925	do	1s. 5½d.	.36
United States	1925	do		.75
Transferers, female:				
England	Dec., 1925	do	8d.	.16
United States	1925	do		.38
Turners, male:				
England	Dec., 1925	do	1s. 4½d.	.34
United States	1925	do		.94
Warehousemen:				
England—				
Glost	Dec., 1925	do	1s. 3d.	.30
Bisque	do	do	1s. 4½d.	.34
United States	1925	do		.59
Germany—				
Time workers—				
Skilled, male—				
Berlin	1926	do	102 pfennigs	.24
District A	1926	do	86 pfennigs	.21
District B	1926	do	72 pfennigs	.17
District C	1926	do	67 pfennigs	.16
Skilled, female—				
District A	1926	do	43 pfennigs	.10
District B	1926	do	41 pfennigs	.10
District C	1926	do	36 pfennigs	.09

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Pottery industry—Continued</i>				
Warehousemen—Continued.				
Germany—Continued.				
Time workers—Continued.				
Unskilled, male:				
Berlin	1926	Hour	75 pfennigs	\$0.18
District A	1926	do	63 pfennigs	.15
District B	1926	do	57 pfennigs	.14
District C	1926	do	55 pfennigs	.13
Unskilled, female:				
Berlin	1926	do	43 pfennigs	.10
District A	1926	do	39 pfennigs	.09
District B	1926	do	35 pfennigs	.08
District C	1926	do	32 pfennigs	.08
Pieceworkers—				
Skilled, male—				
Berlin	1926	do	133 pfennigs	.32
District A	1926	do	104 pfennigs	.25
District B	1926	do	84 pfennigs	.20
District C	1926	do	78 pfennigs	.19
Skilled, female—				
District A	1926	do	53 pfennigs	.13
District B	1926	do	46 pfennigs	.11
District C	1926	do	43 pfennigs	.10
Unskilled, male:				
Berlin	1926	do	104 pfennigs	.25
District A	1926	do	90 pfennigs	.21
District B	1926	do	76 pfennigs	.18
District C	1926	do	67 pfennigs	.16
Unskilled, female:				
Berlin	1926	do	64 pfennigs	.15
District A	1926	do	50 pfennigs	.12
District B	1926	do	42 pfennigs	.10
District C	1926	do	39 pfennigs	.09
<i>Railroads</i>				
Conductors:				
Alaska	Jan., 1925	Day		7.68
Canada (passenger)	Dec., 1926			24.47
Canada (freight, irregular)	do			36.16
United States (passenger)	1926	Hour		1.24
United States (freight)	1926	do		.98
Engineers:				
Alaska	Jan., 1925	Day		8.04
Australia—				
Sydney:				
First class	Dec. 31, 1922	Week	126s	27.90
Second class	do	do	120s	26.57
Third class	do	do	102-114s	22.58-25.24
Melbourne:				
First class	do	do	123s	27.23
Second class	do	do	114-117s	25.24-25.90
Third class	do	do	102-111s	22.58-24.58
Canada (passenger)	Dec., 1926			16.00
Canada (freight, irregular)	do			16.64
Great Britain—				
First and second years	Jan., 1926	Week	72s	17.52
Third and fourth years	do	do	78s	18.98
Fifth year	do	do	84s	20.44
Sixth year	do	do	90s	21.90
Spain, Barcelona	May 1, 1924	Day	17-25 pesetas	2.35-3.45
Tasmania	June 30, 1923	do	14s. 3d.-16s. 9d	3.26-3.83
United States (passenger)	1926	Hour		1.50
United States (freight)	1926	do		1.17
United States (yard)	1926	do		.94
Firemen:				
Alaska	Jan., 1925	Day		6.60
Australia—				
Sydney:				
First class	Dec. 31, 1922	Week	96s	21.25
Second class	do	do	90s	19.93
Third class	do	do	84s	18.60
Melbourne:				
First class	do	do	96s	21.25
Second class	do	do	93s	20.59
Third class	do	do	87-90s	19.26-19.93

<sup>a</sup> Per 100 miles.

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Railroads—Continued</i>				
Firemen—Continued.				
Canada (passenger)	Dec., 1926			\$4.48
Canada (freight, irregular)	do			4.88
Great Britain				
First and second years	Jan., 1926	Week	57s.	13.87
Third and fourth years	do	do	63s.	15.33
Fifth to tenth year	do	do	66s.	16.06
Eleventh year	do	do	72s.	17.52
Tasmania	June 30, 1923	Day	14s. 1d.-15s. 3d.	3.22-3.49
United States (passenger)	1926	Hour		1.17
United States (freight)	1926	do		.88
United States (yard)	1926	do		.73
Dispatchers:				
Canada	Dec., 1926	Month		230.00-238.00
United States	1926	Hour		1.23
Section men:				
Canada	Dec., 1926	Day		3.04
United States	1926	Hour		.36
Telegraphers:				
Canada	Dec., 1926	Month		117.00-128.00
United States	1926	Hour		.64
Blacksmiths:				
Canada	Dec., 1926	do		.70
United States	1926	do		.80
Boilermakers:				
Canada	Dec., 1926	do		.70
United States	1926	do		.80
Cleaners:				
Canada	Dec., 1926	do		.38
United States	1926	do		.41
Car repairers:				
Canada	Dec., 1926	do		.63
United States (carmen A)	1926	do		.76
Machinists:				
Canada	Dec., 1926	do		.70
United States	1926	do		.79
Molders:				
Canada	Dec., 1926	do		.70
United States	1926	do		.86
All workers:				
Australia—Rail and tram workers	Dec. 31, 1925	Week	100s. 6d.	24.37
Germany				
Skilled workers	Oct., 1925	Hour	.798 mark.	.19
Unskilled workers	do	do	.616 mark.	.15
United States	1926	do		.66
<i>Shipping industry</i>				
Able seamen:				
Colombia, Cartagena—Sailors	1924	Day		1.35
Cuba, Cienfuegos	Apr., 1926	do		3.80
Denmark	Jan., 1926	Month		45.00
Dominican Republic—Seamen	May, 1926	do		15.00-20.00
France	Jan., 1926	do		17.00
Germany	do	do		22.00
Great Britain	do	do		44.00
Italy	do	do		20.00
Netherlands	do	do		40.00
New Zealand	July, 1926	do	£10 9s.	50.85
Norway	Jan., 1926	do		38.00
Spain	do	do		21.00
Sweden	do	do		40.00
Venezuela	May 3, 1924	Day		1.50
United States—				
Private vessels	Jan., 1926	Month		60.00
Shipping Board vessels	do	do		62.00
Chief engineers:				
Denmark	Jan., 1926	Month		183.00
France	do	do		127.00
Germany	do	do		98.00
Great Britain	do	do		152.00
Italy	do	do		69.00
Netherlands	do	do		151.00
Norway	1924	do		81.00
Spain	Jan., 1926	do		113.00
Sweden	do	do		148.00

<sup>a</sup> Per 100 miles.

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Shipping industry—Continued</i>				
Chief engineers—Continued.				
United States—				
Private vessels	Jan. 1926	Month		\$270.00
Shipping Board vessels	do	do		263.00
Carpenters:				
Denmark	do	do		54.00
France	do	do		20.00
Germany	do	do		27.00
Great Britain	do	do		75.00
Italy	do	do		23.00
Netherlands	do	do		46.00
Norway	do	do		43.00
Sweden	do	do		46.00
United States—				
Private vessels	do	do		75.00
Shipping Board vessels	do	do		72.00
First mate:				
Denmark	1926	do		151.00
France	1926	do		72.00
Germany	1926	do		67.00
Great Britain	1926	do		111.00
Italy	1926	do		49.00
Netherlands	1926	do		111.00
Norway	1924	do		64.00
Spain	1926	do		99.00
Sweden	1926	do		100.00
United States—				
Private vessels	1926	do		174.00
Shipping Board vessels	1926	do		184.00
Second mate:				
Denmark	1926	do		116.00
France	1926	do		60.00
Germany	1926	do		53.00
Great Britain	1926	do		79.00
Italy	1926	do		41.00
Netherlands	1926	do		84.00
Norway	1924	do		53.00
Spain	1926	do		71.00
Sweden	1926	do		74.00
United States—				
Private vessels	1926	do		151.00
Shipping Board vessels	1926	do		163.00
Third mate:				
Denmark	1926	do		66.00
France	1926	do		48.00
Germany	1926	do		40.00
Great Britain	1926	do		58.00
Italy	1926	do		35.00
Netherlands	1926	do		54.00
Norway	1924	do		38.00
Spain	1926	do		42.00
Sweden	1926	do		59.00
United States—				
Private vessels	1926	do		135.00
Shipping Board vessels	1926	do		149.00
Fourth mate:				
Denmark	1926	do		66.00
France	1926	do		35.00
Germany	1926	do		31.00
Great Britain	1926	do		51.00
Italy	1925	do		32.00
United States—				
Private vessels	1926	do		115.00
Shipping Board vessels	1926	do		150.00
Boatswain:				
Denmark	1926	do		54.00
France	1926	do		20.00
Germany	1926	do		27.00
Great Britain	1926	do		51.00
Italy	1926	do		25.00
Netherlands	1926	do		46.00
Norway	1926	do		43.00
Spain	1926	do		28.00
Sweden	1926	do		46.00
United States—				
Private vessels	1926	do		73.00
Shipping Board vessels	1926	do		74.00

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Shipping industry—Continued</i>				
Seaman, ordinary:				
Denmark	1926	Month		\$23.00
France	1926	do		15.00
Germany	1926	do		12.00
Great Britain	1926	do		28.00
Italy	1925	do		13.00
Netherlands	1926	do		20.00
Norway	1926	do		20.00
Spain	1926	do		17.00
Sweden	1926	do		23.00
United States—				
Private vessels	1926	do		45.00
Shipping Board vessels	1926	do		47.00
Second engineer:				
Denmark	1926	do		132.00
France	1926	do		72.00
Germany	1926	do		67.00
Great Britain	1926	do		114.00
Italy	1926	do		41.00
Netherlands	1926	do		103.00
Norway	1924	do		59.00
Spain	1926	do		71.00
Sweden	1926	do		90.00
United States—				
Private vessels	1926	do		174.00
Shipping Board vessels	1926	do		183.00
Third engineer:				
Denmark	1926	do		98.00
France	1926	do		61.00
Germany	1926	do		53.00
Great Britain	1926	do		79.00
Italy	1926	do		35.00
Netherlands	1926	do		72.00
Norway	1924	do		48.00
Spain	1926	do		49.00
Sweden	1926	do		72.00
United States—				
Private vessels	1926	do		151.00
Shipping Board vessels	1926	do		162.00
Fourth engineer:				
Denmark	1926	do		77.00
France	1926	do		50.00
Germany	1926	do		40.00
Great Britain	1926	do		58.00
Netherlands	1926	do		46.00
Sweden	1926	do		55.00
United States—				
Private vessels	1926	do		136.00
Shipping Board vessels	1926	do		147.00
Junior engineer:				
Denmark	1926	do		64.00
France	1924	do		33.00
Germany	1926	do		26.00
Great Britain	1926	do		51.00
United States—Shipping Board vessels	1925	do		130.00
Greasers:				
Denmark	1926	do		49.00
France	1926	do		20.00
Germany	1926	do		26.00
Great Britain	1925	do		52.00
Netherlands	1926	do		46.00
Sweden	1926	do		43.00
United States—				
Private vessels	1926	do		69.00
Shipping Board vessels	1926	do		72.00
Water tenders:				
Denmark	1926	do		51.00
France	1926	do		18.00
Germany	1926	do		26.00
Great Britain	1926	do		49.00
Spain	1926	do		28.00
United States—				
Private vessels	1926	do		69.00
Shipping Board vessels	1926	do		72.00

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Shipping industry—Continued</i>				
Coal passers or wipers:				
Denmark	1926	Month		\$33.00
France	1926	do		17.00
Germany	1925	do		19.00
Great Britain	1926	do		44.00
Italy	1926	do		20.00
Netherlands	1926	do		34.00
Norway	1926	do		22.00
Spain	1926	do		20.00
Sweden	1926	do		28.00
United States—				
Private vessels	1926	do		53.00
Shipping Board vessels	1926	do		58.00
Chief steward:				
Denmark	1926	do		89.00
France	1924	do		28.00
Germany	1926	do		24.00
Great Britain	1926	do		75.00
Italy	1926	do		25.00
Netherlands	1924	do		28.00
Norway	1926	do		48.00
Spain	1926	do		28.00
Sweden	1926	do		73.00
United States—				
Private vessels	1926	do		124.00
Shipping Board vessels	1926	do		122.00
Second steward:				
France	1924	do		23.00
Great Britain	1926	do		61.00
Italy	1926	do		22.00
United States—				
Private vessels	1926	do		100.00
Shipping Board vessels	1926	do		100.00
Cook:				
Denmark	1926	do		66.00
France	1924	do		30.00
Germany	1926	do		28.00
Great Britain	1926	do		70.00
Italy	1925	do		23.00
Netherlands	1925	do		58.00
Norway	1924	do		30.00
Spain	1926	do		28.00
Sweden	1926	do		48.00
United States—				
Private vessels	1926	do		102.00
Shipping Board vessels	1926	do		100.00
Second cook:				
Denmark	1926	do		32.00
France	1924	do		25.00
Great Britain	1926	do		46.00
Italy	1925	do		22.00
Netherlands	1925	do		52.00
Sweden	1926	do		32.00
United States—				
Private vessels	1926	do		80.00
Shipping Board vessels	1926	do		81.00
Mess steward:				
France	1924	do		20.00
Germany	1926	do		12.00
Great Britain	1926	do		40.00
Italy	1926	do		25.00
Spain	1926	do		11.00
United States—				
Private vessels	1926	do		49.00
Shipping Board vessels	1926	do		47.00
Mess boy:				
Denmark	1925	do		13.00
Germany	1926	do		6.00
Great Britain	1925	do		15.00
Italy	1925	do		12.00
Netherlands	1925	do		10.00
Spain	1926	do		7.00
United States—				
Private vessels	1926	do		41.00
Shipping Board vessels	1926	do		42.00

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Shipping industry—Continued</i>				
Firemen:				
Denmark	Jan., 1926	Month	\$49.00	
France	do	do	18.00	
Germany	do	do	24.00	
Great Britain	do	do	50.00	
Italy	do	do	21.00	
Netherlands	do	do	42.00	
Norway	do	do	39.00	
Spain	do	do	21.00	
Sweden	do	do	40.00	
United States—				
Private vessels	do	do	62.00	
Shipping Board vessels	do	do	66.00	
<i>Street railways</i>				
Conductors:				
Canada—				
Montreal	1926	Hour	.51	
Ottawa	1926	do	.50	
Quebec	1926	do	.45	
Toronto	1926	do	.60	
Winnipeg	1926	do	.57	
Vancouver	1926	do	.62	
Great Britain	Dec. 31, 1925	Week	13.67	
United States	May, 1926	Hour	.66	
Linemen:				
Australia—				
Melbourne	June 30, 1926	Week	25.55	
Sydney	do	do	26.52	
Canada—				
Montreal	1926	Hour	.51	
Ottawa	1926	do	.50	
Quebec	1926	do	.45	
Toronto	1926	do	.60	
Winnipeg	1926	do	.57	
Vancouver	1926	do	.62	
Japan, Osaki	1924	Day	.94	
United States	May, 1926	Hour	.99	
Motormen:				
Canada—				
Montreal	1926	do	.51	
Ottawa	1926	do	.50	
Quebec	1926	do	.45	
Toronto	1926	do	.60	
Winnipeg	1926	do	.57	
Vancouver	1926	do	.62	
Great Britain	Dec. 31, 1925	Week	14.54	
United States	May, 1926	Hour	.66	
<i>Textile industry</i>				
Beamer tenders:				
France, Canton of Lannoy—Males	1922	do	2 francs	.16
United States (cotton)—				
Males	1926			.49
Females	1926			.41
Card tenders, woolen:				
Australia—				
Melbourne	June 30, 1926	Week	84s	20.44
Sydney	do	do	85s	20.68
Canada (cotton)	April, 1922	Hour		.29
Canada (woolen)	do	do		.34
Italy, north	Mar., 1925	Day	18.50 lire	.76
United States—				
Males	1926	Hour		.42
Females	1926	do		.37
United States (cotton)	1926	do		.33
Comber tenders, woolen:				
Australia—				
Melbourne, females	June 30, 1926	Week	42s. 0d	10.22
Sydney, females	do	do	43s. 9d	11.13
United States—				
Males	1926	Hour		.48
Females	1926	do		.38

## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—Con.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Textile industry—Continued</i>				
Drawers-in:				
France, Canton of Lannoy—Females	1922	Hour	2.125 francs	.80.17
United States (cotton)—				
Males	1926	do		.33
Females	1926	do		.36
United States (woolen)—				
Males	1926	do		.67
Females	1926	do		.50
Spoiler tenders:				
France, Canton of Lannoy—Females	1922	do	1.2 francs	.10
United States (cotton)—Females	1926	do		.25
United States (woolen)—Females	1926	do		.39
Spinners:				
Australia—				
Melbourne (woolen)	June 30, 1926	Week	85s. 0d.	20.68
Sydney (woolen)	do	do	84s. 6d.	20.56
Austria, Vienna—				
Pieceworkers (cotton)	Sept., 1923	do	250,000 kronen	3.50
Time workers (cotton)	do	do	222,202 kronen	3.11
Belgium—				
Mule spinners, males	1922	Hour	2.15-2.85 francs	.17-.22
Ring spinners, females	1922	do	1.2-2.1 francs	.09-.16
Canada—				
Mule spinners (cotton)	Apr., 1922	do		.35
Ring spinners (cotton)	do	do		.24
Spinners (woolen)	do	do		.28
China—Females	June, 1924	Day	48 cents Mexican	.25
France, Epinal—Males (cotton)	Oct., 1924	do	17 francs	.89
Germany—				
Leipzig—				
Males (woolen)	Jan. 1, 1927	Hour	73 pfennigs	.17
Females (woolen)	do	do	44.5 pfennigs	.11
Munich-Gladbach—				
Males (cotton)	Nov. 29, 1926	do	66.6 pfennigs	.16
Females (cotton)	do	do	48.1 pfennigs	.11
Greece—	1924	Month	1,700-2,250 drachmas	30.41-40.25
Italy, North—				
Females (cotton)	Mar., 1925	Day	12.8 lire	.52
Female (woolen)	do	do	22.7 lire	.92
Japan—Females (cotton)	1925	do	1.13 yen	.46
United States—				
Mule spinners (cotton)	1926	Hour		.66
Mule spinners (woolen)	1926	do		.70
Frame spinners, male (cotton)	1926	do		.29
Frame spinners, female (cotton)	1926	do		.23
Frame spinners, male (woolen)	1926	do		.37
Frame spinners, female (woolen)	1926	do		.36
Weavers:				
Australia—				
Melbourne, females (woolen)	June 30, 1926	Week	46s. 0d.	11.19
Sydney, females (woolen)	do	do	54s. 9d.	13.32
Austria, Vienna—				
Time workers (cotton)	Sept., 1923	do	200,410 kronen	2.81
Pieceworkers (cotton)	do	do	230,000 kronen	3.22
Belgium—	1922	Hour	1.15-2.75 francs	.09-.21
Canada (cotton)	Apr., 1922	do		.30
Canada (woolen)	do	do		.28
China, Shansi (cotton)	June, 1925	Day	30-35 cents Mexican	.17-.19
France—	Oct., 1923	Hour	2.26 francs	.10
Greece—	1924	Month	1,800-3,400 drachmas	32.20-60.83
Germany, Hamburg—				
Males	Dec., 1925	Hour	0.70 mark	.17
Females	do	do	0.42 mark	.10
Italy, North—				
Females (cotton)	Mar., 1925	Day	13 lire	.53
Males (woolen)	do	do	14.95 lire	.61
Females (woolen)	do	do	14.80 lire	.60
Japan—Females (cotton)	1925	do	0.97 yen	.48
United States—				
Males (cotton)	1926	Hour		.40
Females (cotton)	1926	do		.38
Males (woolen)	1926	do		.65
Females (woolen)	1926	do		.60

## COMPARATIVE WAGE RATES

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## COMPARATIVE WAGE RATES IN FOREIGN COUNTRIES AND UNITED STATES—CAB.

Industry, occupation, and country	Date to which figures apply	Time unit	Foreign money	United States currency
<i>Textile industry—Continued</i>				
All workers:				
China, Shanghai—				
Males, semiskilled	Mar. 15, 1923	Day	35-55 cents Mexican	\$0.18-\$0.29
Females, semiskilled	do	do	30-55 cents Mexican	.16-.29
Males, unskilled	do	do	35-40 cents Mexican	.18-.21
Colombia, Cartagena (cotton)	1924	Hour		.13
Denmark—				
Males	3d quarter, 1924	do	131 øre	.21
Females	do	do	90 øre	.16
Germany—				
Males, skilled	Oct., 1925	do	0.621 mark	.15
Females, skilled	do	do	0.499 mark	.12
Males, unskilled	do	do	0.521 mark	.12
Females, unskilled	do	do	0.387 mark	.09
Great Britain (cotton)	1924			
Great Britain (woolen)	1924			
Sweden—	1923			
Tasmania—				
Males	June 30, 1923	Week	78-82s	17.84-18.75
Females	do	do	35s	8.00
United States (cotton)	1926	Hour		.33
United States (woolen)	1926	do		.49
<i>Miscellaneous</i>				
Chauffeurs:				
Arabia	July 19, 1922	Month	50 rupees	17.30
Belgium, Brussels	Oct. 15, 1925	Week	155 francs	7.01
Brazil, Parahyba	1926	Day	4-6 milreis	.58-.97
Cuba, Cienfuegos	do	do		2.50
Denmark	3d quarter, 1924	Week	69.8 kroner	11.31
Dominican Republic	May, 1926	Month		20.00-40.00
Venezuela	May 3, 1924	Day		2.50
United States	May, 1926	Hour		.66
Laborers:				
Brazil, Parahyba	1926	Day	2½-3 milreis	.38-.43
Colombia, Cartagena	1924	do		1.20
Cuba, Cienfuegos	Apr., 1926	do		2.00
Dominican Republic	May, 1926	do		.50-.80
Great Britain (shipbuilding)	Dec. 31, 1925	Week	38s. 5d.	9.32
Haiti	Oct., 1925	Day		.25-.35
Japan—				
Males	1925	do	2.13 yen	.87
Females	1925	do	1.14 yen	.47
Manchuria, Dairen	1924	Month	40 yen	16.48
Spain, Barcelona (subway construction)	May 1, 1924	Day	9 pesetas	1.24
Venezuela	May 3, 1924	do		1.60
United States	1927	Hour		.43
Longshoremen:				
Cuba, Cienfuegos	1926	Day		3.80
Denmark, Copenhagen	1924	Hour	299 øre	.50
Dominican Republic	May, 1926	Day		1.00-1.75
France, Nantes	Oct., 1924	do	18.5 francs	.97
Germany, Hamburg	Sept., 1926	do	7.20-8.64 marks	1.71-2.06
Jamaica	1925	do		1.75
Japan	1925	do	2.55 yen	1.05
Venezuela	May 3, 1924	Hour		.30
United States	May, 1926	do		.84

## Wage Rates Established by Collective Agreements in Various Cities of the World

**T**HE table below gives the wage rates established by collective agreements for certain occupations in important cities of the world, as compiled by the International Labor Office.<sup>a</sup> In the original report of that office the wage entries are on an hourly basis, and given in terms of the currencies of the respective countries and also as converted into gold francs. In the table here presented all entries are for a 48-hour week and are in United States currency, conversion having been made by multiplying the gold franc entries of the original report by the par value of the gold franc—19.3 cents.

**COMPARISON OF ORDINARY WAGES PER 48-HOUR WEEK IN SPECIFIED TRADES IN SPECIFIED CITIES IN DECEMBER, 1926**

City	Building trades		Engineering (metal) trades		Furniture trades		Printing trades		
	Masons and brick-layers	Laborers	Fitters	Laborers	Cabinet-makers	Laborers	Hand compositors	Machine compositors	Laborers
Philadelphia.....	\$72.00	\$40.80	\$38.40				\$43.20	\$45.12	
Amsterdam.....	15.38	12.51	12.88	\$10.28	\$13.06		13.99	15.75	\$11.21
Berlin.....	14.36	10.93		7.41	11.77	\$9.82	11.39	13.71	10.01
Brussels.....	5.93	4.08	5.28	\$3.80	6.76		6.67	7.04	
Lodz, Poland.....	5.37	2.69	4.08	2.59			8.52	12.14	7.28
London.....	20.57	15.75	15.10	10.75	20.38	15.01	21.59	23.25	17.23
Madrid.....	10.01	5.93	10.93	6.39	10.93		11.12	12.32	
Oslo, Norway.....	21.03	19.08	18.34	10.15.56	10.20.94		21.77	10.26.96	
Ottawa.....	48.00	19.20	28.80	19.20	27.60	16.80	36.96	36.96	
Paris.....	9.26	6.95	8.71	6.02	11.02	8.34	11.02	11.11.77	
Prague.....	7.41	5.10	7.23	4.54	8.52	4.45		8.43	5.65
Rome.....	8.24	6.21	7.41	5.19	10.28	5.56	8.71		7.04
Stockholm.....	20.47	18.53			15.38	13.80	16.12	17.69	10.13.15
Sydney.....	28.63	26.50	27.79	23.35	26.96	23.99	29.64		
Vienna.....	9.63	7.50		5.00	7.50	4.91	8.52	10.28	5.93
Warsaw.....	5.74	3.52	4.54	2.96			12.69	17.79	10.6.39

<sup>a</sup> May, 1926; in Bureau of Labor Statistics Bul. 431 union wage rates for bricklayers are \$78, and for stone masons \$72.

<sup>b</sup> May, 1926.

<sup>c</sup> Average.

<sup>d</sup> Including family allowances for married workers.

<sup>e</sup> May, 1926; average.

<sup>f</sup> Excluding output bonus.

<sup>g</sup> Typographers' mates; average.

<sup>h</sup> Delivery men.

<sup>i</sup> Special group.

<sup>j</sup> June, 1926.

<sup>k</sup> Linotype operators.

<sup>l</sup> Minimum.

<sup>m</sup> On printing presses only.

<sup>n</sup> Excluding output bonus; minimum.

<sup>o</sup> Typographers' mates.

\* International Labor Office. International Economic Conference, Geneva, May 4, 1927. Report on the standard of living of workers in various countries. Geneva, 1926, pp. 9-25.

## PLACEMENT OF DISABLED WORKERS

### Employment Bureau for the Disabled in New York City

A PRESS release issued by the Welfare Council of New York states that the opening of the Joint Employment Bureau for the Disabled on July 1, 1927, will simplify the problem of finding work for disabled persons of all kinds, including men and women having arrested cases of tuberculosis, heart disease, and other ailments. The bureau is a consolidation of the employment service of four organizations—the Institute for Crippled and Disabled Men, the Employment Bureau for the Handicapped, the New York Tuberculosis and Health Association, and the Jewish Social Service Association—and was formed as a result of a survey which showed that 12 separate agencies were engaged in finding work for the handicapped and that there was need for coordinating the work of these agencies. By merging the job-finding facilities of the four organizations, which have done the bulk of this work in the past, it is considered that the more economical and efficient operation of this service will benefit not only the handicapped portion of the population but also the industries of the city and the community at large as it will permit these organizations to concentrate more effectively on their other services.

In announcing the inauguration of the bureau, Mr. Henry Esberg, chairman of the board of directors, said:

The speeding up of industry, commerce, and life in general is producing more and more cripples each year. Compensation laws and, sometimes, benevolence of employers make possible rehabilitation of some of these cripples. The problem of finding new work for the handicapped has, however, devolved on the social agencies of the city, and it has become a most difficult and expensive problem. Employers' prejudices must be replaced by the knowledge that employment of handicapped persons is economically sound and the handicapped persons themselves must be given a new outlook on life and a new realization of their opportunities and responsibilities.

## TREND OF EMPLOYMENT

### Employment in Selected Manufacturing Industries in June, 1927

EMPLOYMENT in manufacturing industries decreased 0.7 per cent in June as compared with May, and pay-roll totals decreased 2.4 per cent. This is the third successive month of decreased employment, but the percentage of decrease this month is less than in either May or April.

Employment in June, 1927, was 2.4 per cent lower than in June, 1926, and pay-roll totals were 2.3 per cent lower.

The bureau's weighted index of employment for June, 1927, is 89.1, as compared with 89.7 for May, 1927, 90.6 for April, 1927, and 91.3 for June, 1926; the weighted index of pay-roll totals for June, 1927, is 93.3, as compared with 95.6 for May, 1927, 96.6 for April, 1927, and 95.5 for June, 1926.

The report for June, 1927, is based on returns from 10,546 establishments in 54 of the principal manufacturing industries. These establishments in June had 3,006,203 employees whose combined earnings in one week were \$79,838,722.

### Comparison of Employment and Pay-Roll Totals in May and June, 1927

TWENTY-FIVE of the 54 separate industries had more employees in June, 1927, than in May, while only 20 industries reported increased pay-roll totals.

The food and tobacco groups of industries, as customary in June, each made decided increases both in employment and pay-roll totals, the increases in the food group being considerably larger than usual. Each of the separate industries of these groups reported good-sized increases in both items. The lumber and the stone, clay, and glass groups both advanced slightly as to employment, and the lumber group's pay-roll total was unchanged, but the stone, clay, and glass group's pay-roll total decreased over 2 per cent in June.

The textile group as a whole sustained losses of nearly 1 per cent both in employment and pay-roll total. The increases in employment in this group were in the cotton, woolen, and men's clothing industries only, while among the decreases in the other industries those in women's clothing and in millinery and lace goods were exceptionally large. Only two of the eight industries of the iron and steel and their products group gained employees in June—structural ironwork and steam fittings—both being especially concerned with the building industry. The greatest falling off in employment in this group was shown by the iron and steel industry. The chemical group as a whole made a loss of over 4 per cent in employment, caused by a seasonal drop of 27 per cent in the fertilizer industry.

Considerable decreases in June in the vehicle group were caused chiefly by a falling off in the automobile industry of 5.3 per cent in employment and of 17.2 per cent in pay-roll totals, while in the

group of miscellaneous industries there were drops in shipbuilding of 3.4 per cent in employment and of 6.5 per cent in pay-roll totals.

A larger volume of employment appeared in June in the West Central divisions, both North and South, and in the Mountain and Pacific divisions, while the two East Central and the three Eastern divisions all reported depleted forces.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN MAY AND JUNE, 1927

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		May, 1927	June, 1927		May, 1927	June, 1927	
<b>Food and kindred products</b>	<b>1,651</b>	<b>207,915</b>	<b>218,248</b>	(1)	<b>\$5,394,614</b>	<b>\$5,623,118</b>	(1)
Slaughtering and meat packing	188	81,920	87,332	+6.6	2,154,960	2,272,433	+5.5
Confectionery	290	30,430	31,431	+3.3	573,068	595,060	+3.8
Ice cream	196	10,044	10,856	+8.1	330,027	355,536	+7.7
Flour	328	14,587	14,765	+1.2	385,469	392,089	+1.7
Baking	637	63,304	66,052	+4.3	1,720,107	1,768,633	+2.6
Sugar refining, cane	12	7,630	7,812	+2.4	230,983	239,367	+3.6
<b>Textiles and their products</b>	<b>1,911</b>	<b>611,187</b>	<b>610,119</b>	(1)	<b>12,163,344</b>	<b>12,170,243</b>	(1)
Cotton goods	488	240,581	241,525	+0.4	3,983,772	3,970,566	-0.3
Hosiery and knit goods	252	84,213	83,838	-0.4	1,689,039	1,635,215	-3.2
Silk goods	198	56,925	55,517	-2.5	1,225,469	1,194,711	-2.5
Woolen and worsted goods	191	60,873	61,096	+0.4	1,346,109	1,363,023	+1.3
Carpets and rugs	30	24,424	24,309	-0.5	664,161	655,145	-1.4
Dyeing and finishing textiles	99	31,363	31,011	-1.1	762,459	750,974	-1.5
Clothing, men's	290	60,366	63,455	+5.1	1,372,016	1,574,767	+14.8
Shirts and collars	83	18,328	18,192	-0.7	302,172	296,703	-1.8
Clothing, women's	202	22,168	20,070	-9.5	532,457	467,918	-12.1
Millinery and lace goods	78	11,946	11,106	-7.0	284,790	267,221	-6.2
<b>Iron and steel and their products</b>	<b>1,762</b>	<b>670,660</b>	<b>661,531</b>	(1)	<b>19,999,858</b>	<b>19,631,486</b>	(1)
Iron and steel	207	275,345	269,236	-2.2	8,307,916	8,205,173	-2.3
Cast-iron pipe	40	14,459	14,194	-1.8	354,613	340,171	-4.1
Structural ironwork	152	22,954	23,226	+1.2	669,776	689,611	+3.0
Foundry and machine-shop products	958	245,394	242,793	-1.1	7,369,969	7,212,433	-2.1
Hardware	63	30,288	29,968	-1.1	766,850	754,719	-1.6
Machine tools	154	29,748	29,397	-1.2	917,278	903,667	-1.5
Steam fittings and steam and hot-water heating apparatus	111	38,696	38,990	+0.8	1,145,103	1,150,237	+0.4
Stoves	77	13,776	13,727	-0.4	378,263	375,475	-0.7
<b>Lumber and its products</b>	<b>1,114</b>	<b>264,781</b>	<b>265,668</b>	(1)	<b>4,518,558</b>	<b>4,500,210</b>	(1)
Lumber, sawmills	450	117,845	118,301	+0.4	2,381,962	2,397,016	+0.6
Lumber, millwork	249	28,750	29,074	+1.1	717,292	722,353	+0.7
Furniture	415	58,186	57,693	-0.8	1,419,304	1,380,841	-2.1
<b>Leather and its products</b>	<b>371</b>	<b>121,255</b>	<b>120,757</b>	(1)	<b>2,753,605</b>	<b>2,775,346</b>	(1)
Leather	132	27,477	27,506	+0.1	686,123	691,621	+0.8
Boots and shoes	239	93,778	93,251	-0.6	2,067,482	2,083,719	+0.8
<b>Paper and printing</b>	<b>849</b>	<b>171,162</b>	<b>170,646</b>	(1)	<b>5,635,651</b>	<b>5,554,501</b>	(1)
Paper and pulp	194	55,199	55,004	-0.2	1,470,428	1,445,867	-1.7
Paper boxes	175	17,926	17,937	+0.1	398,798	393,169	-1.4
Printing, book and job	271	48,241	48,067	-0.4	1,712,168	1,700,719	-0.7
Printing, newspapers	209	49,706	49,548	-0.5	2,054,257	2,014,746	-1.9
<b>Chemicals and allied products</b>	<b>311</b>	<b>90,490</b>	<b>87,700</b>	(1)	<b>2,660,309</b>	<b>2,692,062</b>	(1)
Chemicals	127	31,426	31,663	+0.8	869,024	886,783	+2.0
Fertilizers	124	8,166	5,964	-27.0	160,541	128,118	-20.2
Petroleum refining	60	50,998	50,142	-1.5	1,630,744	1,677,161	+2.8
<b>Stone, clay, and glass products</b>	<b>639</b>	<b>110,288</b>	<b>110,756</b>	(1)	<b>2,066,117</b>	<b>2,042,950</b>	(1)
Cement	90	25,167	25,720	+2.2	792,130	778,512	-1.7
Brick, tile, and terra cotta	380	34,064	34,111	+0.1	909,991	897,755	-1.3
Pottery	58	13,107	12,974	-1.0	335,758	317,600	-5.4
Glass	111	37,950	37,951	(1)	968,238	949,092	-2.0

<sup>1</sup>The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishment of the country in the industries here represented, see Table 2.

<sup>2</sup>Less than one-tenth of 1 per cent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN MAY AND JUNE, 1927—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		May, 1927	June, 1927		May, 1927	June, 1927	
Metal products, other than iron and steel	208	51,962	50,473	(1)	\$1,411,145	\$1,358,407	(1)
Stamped and enameled ware	63	18,504	18,091	-2.2	466,971	452,311	-3.1
Brass, bronze, and copper products	145	33,458	32,382	-3.2	944,174	906,096	-4.0
Tobacco products	183	42,358	43,398	(1)	753,269	781,074	(1)
Chewing and smoking tobacco and snuff	31	8,274	8,297	+0.3	131,464	137,746	+4.8
Cigars and cigarettes	152	34,084	35,101	+3.0	621,745	643,328	+3.5
Vehicles for land transportation	1,152	492,099	475,593	(1)	16,424,508	14,393,971	(1)
Automobiles	196	326,694	309,230	-5.3	11,286,853	9,341,567	-17.2
Carriages and wagons	65	1,656	1,577	-4.8	36,827	34,939	-5.1
Car building and repairing, electric-railroad	387	25,813	26,228	+1.6	812,176	817,010	+0.6
Car building and repairing, steam-railroad	504	137,936	138,558	+0.5	4,288,652	4,200,455	-2.1
Miscellaneous industries	395	251,781	251,845	(1)	7,522,146	7,400,351	(1)
Agricultural implements	84	23,365	22,920	-1.9	684,611	651,617	-4.8
Electrical machinery, apparatus, and supplies	171	117,312	119,992	+2.3	3,508,213	3,550,421	+1.5
Pianos and organs	39	6,928	6,930	(1)	203,886	199,203	-2.3
Rubber boots and shoes	10	17,677	17,596	-0.5	451,619	436,996	-3.2
Automobile tires	52	56,339	55,252	-1.9	1,793,793	1,730,497	-3.5
Shipbuilding, steel	39	30,160	29,146	-3.4	880,024	822,617	-6.5
All industries	10,546	3,025,938	3,006,203	(1)	\$2,243,064	\$2,188,722	(1)

*Recapitulation by Geographic Divisions*

GEOGRAPHIC DIVISION							
New England	1,396	421,051	414,847	-1.5	\$10,356,880	\$10,120,632	-2.3
Middle Atlantic	2,578	856,008	850,981	-0.6	24,493,460	24,190,834	-1.2
East North Central	2,886	1,005,754	994,086	-1.2	30,942,556	29,184,838	-5.7
West North Central	1,018	155,564	158,929	+2.2	4,046,620	4,059,054	+0.3
South Atlantic	1,149	288,725	287,017	-0.6	5,435,853	5,345,414	-1.7
East South Central	461	104,397	104,045	-0.3	2,044,590	2,021,706	-1.1
West South Central	465	86,856	86,925	+0.1	1,907,780	1,883,378	-1.3
Mountain	177	26,444	26,905	+1.7	752,740	756,033	+0.4
Pacific	416	81,049	82,468	+1.8	2,262,585	2,276,833	+0.6
All divisions	10,546	3,025,938	3,006,203	(1)	\$2,243,064	\$2,188,722	(1)

<sup>1</sup>The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishment of the country in the industries here represented, see Table 2.

<sup>2</sup>Less than one-tenth of 1 per cent.

TABLE 2.—PER CENTS OF CHANGE, MAY TO JUNE, 1927—12 GROUPS OF INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group by the number of employees, or wages paid, in the industries]

Group	Per cent of changes, May, 1927, to June, 1927.		Group	Per cent of changes, May, 1927, to June, 1927.	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products	+4.7	+4.0	Metal products, other than iron and steel	-3.0	-3.8
Textiles and their products	-0.9	-0.9	Tobacco products	+2.7	+3.8
Iron and steel and their products	-1.4	-1.8	Vehicles for land transportation	-2.1	-8.9
Lumber and its products	+0.2	(1)	Miscellaneous industries	-1.5	-4.0
Leather and its products	-0.4	+0.9	All Industries	-0.7	-2.4
Paper and printing	-0.4	-1.4			
Chemicals and allied products	-4.2	-0.2			
Stone, clay, and glass products	+0.1	-2.1			

<sup>1</sup>No change.

**Comparison of Employment and Pay-Roll Totals in June, 1927, and June, 1926**

EMPLOYMENT in manufacturing industries was 2.4 per cent lower in June, 1927, than in June, 1926, and pay-roll totals were 2.3 per cent lower.

A decidedly greater volume of employment was reported in June, 1927, than in June, 1926, in the food and the textile groups of industries, and in the group of miscellaneous industries. The outstanding increases, over the twelve-month period, in individual industries of these groups, were those in cotton goods, automobile tires, and shipbuilding. The outstanding decreases over this period in these groups were in the ice cream, agricultural implement, and piano industries.

The following groups of industries were much less favorably placed as to employment in June, 1927, than in June, 1926: Iron and steel; lumber; stone, clay, and glass; metal, other than iron and steel; and vehicle. Each of the separate industries making up these groups had sustained noticeable losses in employment, with the exception of electric car building and repairing which showed a small increase. The remaining four groups—leather, paper and printing, chemicals, and tobacco—also had fewer employees in June, 1927, than in June, 1926, but the decreases were comparatively small.

The South Atlantic division alone of the nine geographic divisions reported increased employment over this 12-month period, the increase being 2.8 per cent. The employment percentage losses in the Middle Atlantic and the East and the West South Central States were each about double this percentage.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, JUNE, 1927, WITH JUNE, 1926

[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted in the same manner as are the per cents of change in Table 2]

Industry	Per cent of change, June, 1926, to June, 1927		Industry	Per cent of change, June, 1926, to June, 1927	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
<b>Food and kindred products</b>			<b>Paper and printing—Cont.</b>		
Slaughtering and meat packing	+2.3	+2.7	Printing, book and job	+0.4	+1.0
Confectionery	+4.9	+4.8	Printing, newspapers	+4.2	+4.8
Ice cream	+1.3	+2.6			
Flour	-8.9	-9.2	<b>Chemicals and allied products</b>	-3.6	(1)
Baking	+3.6	+4.7	Chemicals	-0.6	+4.0
Sugar refining, cane	+1.6	+1.6	Fertilizers	-12.3	-8.4
	+1.5	+4.9	Petroleum refining	-4.7	-2.5
<b>Textiles and their products</b>					
Hosiery and knit goods	+2.4	+5.9	<b>Stone, clay, and glass products</b>	-4.8	-6.0
Cotton goods	+0.1	+3.7	Cement	-3.5	-3.7
Silk goods	+7.2	+14.3	Brick, tile, and terra cotta	-4.1	-4.9
Woolen and worsted goods	+2.5	+6.7	Pottery	-5.5	-10.8
Carpets and rugs	+2.4	+3.7	Glass	-5.9	-6.4
Dyeing and finishing textiles	-0.7	+4.7			
Clothing, men's	+1.4	+5.8	<b>Metal products, other than iron and steel</b>	-5.8	-6.2
Shirts and collars	-2.1	-0.6	Stamped and enameled ware	-9.8	-6.4
Clothing, women's	-5.9	-4.1	Brass, bronze, and copper products	-4.1	-6.1
Millinery and lace goods	+2.2	+2.1			
	-3.6	+2.9	<b>Tobacco products</b>	-2.4	-0.9
<b>Iron and steel and their products</b>			Chewing and smoking tobacco and snuff	-5.0	-2.8
Iron and steel	-6.4	-8.7	Cigars and cigarettes	-2.1	-0.7
Cast-iron pipe	-5.0	-4.9			
Structural ironwork	-7.6	-10.5	<b>Vehicles for land transportation</b>	-7.6	-9.4
Foundry and machine-shop products	-4.1	-4.0	Automobiles	-6.4	-11.2
Hardware	-7.3	-8.8	Carriages and wagons	-10.4	-16.0
Machine tools	-5.3	-5.2	Car building and repairing, electric-railroad	+2.2	+2.0
Steam fittings and steam and hot-water heating apparatus	-6.3	-5.9	Car building and repairing, steam-railroad	-8.9	-8.8
Stoves	-7.6	-8.9			
	-5.7	-4.6	<b>Miscellaneous industries</b>	+4.1	+4.6
<b>Lumber and its products</b>			Agricultural implements	-8.9	-9.6
Lumber, sawmills	-8.8	-7.3	Electrical machinery, apparatus, and supplies	-2.0	-1.5
Lumber, millwork	-10.6	-9.0	Pianos and organs	-11.6	-14.5
Furniture	-8.9	-8.7	Rubber boots and shoes	+0.3	+8.8
	-2.6	-0.1	Automobile tires	+6.6	+9.3
<b>Leather and its products</b>			Shipbuilding, steel	+11.0	+8.8
Leather	-0.1	-0.2			
Boots and shoes	+0.9	+0.1	<b>All industries</b>	-2.4	-2.3
	-0.5	-0.4			
<b>Paper and printing</b>					
Paper and pulp	-0.1	+0.2			
Paper boxes	-4.1	-5.7			
	-3.3	-2.0			

#### Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION			GEOGRAPHIC DIVISION—con.		
New England	-3.2	-1.5	West South Central	-5.6	-2.0
Middle Atlantic	-5.2	-5.5	Mountain	-4.0	-2.2
East North Central	-2.2	-2.8	Pacific	-0.7	-0.5
West North Central	-0.6	-2.3			
South Atlantic	+2.8	+3.0	<b>All divisions</b>	-2.4	-2.3
East South Central	-5.7	-5.1			

<sup>1</sup> No change.

**Per Capita Earnings**

**PER CAPITA** earnings in June, 1927, in the 54 industries combined, were 1.8 per cent lower than in May, 1927, and 0.1 per cent higher than in June, 1926.

Fifteen industries showed a gain in per capita earnings in June, 1927, as compared with May, 1927, while 34 industries showed a gain in June, 1927, as compared with June, 1926.

In the monthly comparison the fertilizer and the men's clothing industries showed the greatest gains—over 9 per cent each. The fertilizer industry was in its slack season in June and had on its pay roll chiefly its skilled employees, while the men's clothing industry was in its rush season and its pay-roll totals were unusually high. The one large decrease in the monthly comparison was in the automobile industry, its pay-roll totals in June having fallen off over 17 per cent as compared with May.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, JUNE, 1927, WITH MAY, 1927, AND JUNE, 1926

Industry	Per cent of change June, 1927, compared with—		Industry	Per cent of change June, 1927, compared with—	
	May, 1927	June, 1926		May, 1927	June, 1926
Fertilizers	+9.3	+4.0	Brass, bronze, and copper products	-0.9	-2.4
Clothing, men's	+9.2	+1.5	Carpets and rugs	-0.9	+4.3
Chewing and smoking tobacco and snuff	+4.5	+2.1	Car building and repairing, electric-railroad	-1.0	-0.1
Petroleum refining	+4.4	+2.0	Stamped and enameled ware	-1.0	+3.8
Structural ironwork	+1.7	+0.2	Foundry and machine-shop products	-1.1	-1.7
Boots and shoes	+1.4	-0.1	Shirts and collars	-1.1	+1.6
Chemicals	+1.3	+4.8	Slaughtering and meat packing	-1.1	-0.1
Sugar refining, cane	+1.2	+3.8	Furniture	-1.2	+0.5
Millinery and lace goods	+0.9	+6.2	Baking	-1.4	+0.1
Woolen and worsted goods	+0.9	+1.5	Printing, newspapers	-1.4	+0.4
Leather	+0.7	-1.0	Brick, tile, and terra cotta	-1.5	-0.7
Cigars and cigarettes	+0.5	+1.3	Paper boxes	-1.5	+1.1
Confectionery	+0.5	+1.0	Paper and pulp	-1.5	-1.8
Flour	+0.5	+1.3	Automobile tires	-1.6	+2.6
Lumber, sawmills	+0.2	+1.9	Glass	-2.0	-0.9
Silk goods	(1)	+4.1	Cast-iron pipe	-2.3	-3.2
Iron and steel	-0.1	(2)	Pianos and organs	-2.3	-3.4
Ice cream	-0.3	-0.5	Car building and repairing, steam-railroad	-2.5	+0.4
Machine tools	-0.3	+0.6	Hosiery and knit goods	-2.8	+3.8
Printing, book and job	-0.3	+0.7	Rubber boots and shoes	-2.8	+8.2
Steam fitting and steam and hot-water heating apparatus	-0.3	-1.3	Agricultural implements	-3.0	-1.0
Carriages and wagons	-0.4	+4.1	Clothing, women's	-3.0	-0.2
Dyeing and finishing textiles	-0.4	+4.2	Shipbuilding, steel	-3.3	-2.2
Lumber, millwork	-0.4	+0.1	Cement	-3.8	-0.2
Stoves	-0.4	+1.0	Pottery	-4.4	-5.6
Hardware	-0.6	+0.1	Automobiles	-12.6	-5.3
Cotton goods	-0.7	+6.9			
Electrical machinery, apparatus, and supplies	-0.8	+0.5			

<sup>1</sup> Less than one-tenth of 1 per cent.

<sup>2</sup> No change.

**Wage Changes**

THIRTY-FIVE establishments in 16 industries reported increases in wage rates during the month ending June 15, 1927. These increases averaged 6.5 per cent and affected 1,446 employees, or 12 per cent of the total number in the establishments concerned.

Sixteen establishments in 9 industries reported decreases in wage rates during the same period. The decreases averaged 9 per cent and affected 4,023 employees, or 83 per cent of all employees in the establishments concerned.

TABLE 5.—WAGE ADJUSTMENTS OCCURRING BETWEEN MAY 15 AND JUNE 15, 1927

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		Per cent of employees In all establish- ments reporting
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	In establish- ments reporting increase or decrease in wage rates	
Increases							
Slaughtering and meat packing.	188	1	6.0	6.0	160	10	(1)
Confectionery	290	2	5.0- 6.9	6.5	25	7	(1)
Baking	637	4	2.5-12.5	7.2	32	15	(1)
Cotton goods	488	1	10.0	10.0	173	66	(1)
Silk goods	198	1	6.0	6.0	28	5	(1)
Clothing, women's	202	1	5.0	5.0	32	100	(1)
Foundry and machine-shop products	958	7	5.0-13.8	8.1	150	7	(1)
Stoves	77	2	8.0	8.0	27	8	(1)
Paper and pulp	194	1	10.0	10.0	45	8	(1)
Paper boxes	175	1	10.0	10.0	7	6	(1)
Printing, book and job	271	3	5-10.0	6.3	22	7	(1)
Printing, newspapers	200	1	2.2	2.2	128	86	(1)
Automobiles	196	2	5.0- 7.0	7.0	236	13	(1)
Car building and repairing, electric-railroad	387	4	4.0	4.0	90	41	(1)
Car building and repairing, steam railroad	504	1	6.0	6.0	190	13	(1)
Electrical machinery, apparatus, and supplies	171	3	1.4-21.0	4.7	92	6	(1)
Decreases							
Woolen and worsted goods	191	1	10.0	10.0	985	100	2
Clothing, men's	200	1	5.0	5.0	182	97	(1)
Iron and steel	207	1	3.0	3.0	400	51	(1)
Structural ironwork	152	1	6.5	6.5	65	28	(1)
Foundry and machine-shop products	958	1	10.0	10.0	52	79	(1)
Lumber, sawmills	450	7	5.0-20.0	10.0	1,695	97	
Lumber, millwork	249	2	8.0-10.0	8.8	29	69	(1)
Boots and shoes	239	1	10.0	10.0	577	80	
Brick, tile and terra cotta	380	1	7.0	7.0	38	57	(1)

<sup>1</sup> Less than one-half of 1 per cent.

## Index of Employment and Pay-roll Totals in Manufacturing Industries

INDEX numbers for June, 1927, and for April and May, 1927, and June, 1926, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries appear in Table 6.

The general index of employment for June, 1927, is 89.1, this number being 0.7 per cent lower than the index for May, 1927, 1.7 per cent lower than the index for April, 1927, and 2.4 per cent lower than the index for June, 1926. The general index of pay-roll totals for June, 1927, is 93.3, this number being 2.4 per cent lower than the index for May, 1927, 3.4 per cent lower than the index for April, 1927, and 2.3 per cent lower than the index for June, 1926.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—JUNE, 1926, AND APRIL, MAY, AND JUNE, 1927

[Monthly average, 1923=100]

Industry	Employment				Pay-roll totals			
	June, 1926	April, 1927	May, 1927	June, 1927	June, 1926	April, 1927	May, 1927	June, 1927
<b>General index</b>	<b>91.3</b>	<b>90.6</b>	<b>89.7</b>	<b>89.1</b>	<b>95.5</b>	<b>96.6</b>	<b>95.6</b>	<b>93.3</b>
<b>Food and kindred products</b>	<b>88.7</b>	<b>86.0</b>	<b>86.6</b>	<b>90.7</b>	<b>93.9</b>	<b>90.0</b>	<b>92.7</b>	<b>96.4</b>
Slaughtering and meat packing	79.7	77.5	78.4	83.6	83.6	80.0	83.1	87.6
Confectionery	76.5	75.9	75.0	77.5	85.4	82.2	84.4	87.6
Ice cream	113.6	87.9	95.8	103.5	121.9	95.1	102.8	110.7
Flour	82.3	82.4	84.3	85.3	84.9	83.5	87.4	88.9
Baking	103.2	101.0	100.5	104.8	108.7	106.5	107.4	110.4
Sugar refining, cane	97.2	93.0	96.4	98.7	99.5	94.5	100.8	104.4
<b>Textiles and their products</b>	<b>84.0</b>	<b>88.3</b>	<b>86.8</b>	<b>86.0</b>	<b>81.4</b>	<b>88.9</b>	<b>87.0</b>	<b>86.2</b>
Cotton goods	81.7	87.6	87.3	87.6	77.4	89.1	88.8	88.5
Hosiery and knit goods	97.1	98.3	97.6	97.2	108.0	114.8	115.7	112.0
Silk goods	95.4	101.2	100.3	97.8	99.0	106.0	108.3	105.6
Woolen and worsted goods	76.4	79.7	77.8	78.2	74.7	77.4	76.5	77.5
Carpets and rugs	89.7	90.7	89.5	89.1	85.4	89.2	90.7	89.4
Dyeing and finishing textiles	95.9	100.1	98.3	97.2	94.2	105.8	101.3	99.7
Clothing, men's	84.3	79.6	78.5	82.5	77.8	67.4	67.4	77.3
Shirts and collars	82.6	79.0	78.3	77.7	83.0	81.6	81.0	79.6
Clothing, women's	75.6	90.6	85.4	77.3	70.9	92.9	82.3	72.4
Milinery and lace goods	67.3	73.5	69.8	64.9	66.3	78.5	72.7	68.2
<b>Iron and steel and their products</b>	<b>92.8</b>	<b>89.4</b>	<b>88.1</b>	<b>86.9</b>	<b>98.4</b>	<b>96.4</b>	<b>93.5</b>	<b>91.8</b>
Iron and steel	97.2	95.3	94.4	92.3	102.0	104.9	99.2	97.0
Cast-iron pipe	108.1	99.8	101.7	99.9	111.6	103.5	104.1	99.9
Structural ironwork	99.8	94.2	94.5	95.7	109.4	97.9	101.9	105.0
Foundry and machine-shop products	88.8	85.0	83.2	82.3	93.6	88.7	87.2	85.4
Hardware	86.6	84.1	82.9	82.0	95.4	94.0	91.8	90.4
Machine tools	101.5	98.8	96.2	95.1	112.1	107.8	107.1	105.5
Steam fittings and steam and hot-water heating apparatus	98.1	91.0	89.9	90.6	105.8	96.2	96.0	96.4
Stoves	85.4	80.4	80.8	80.5	85.6	83.1	82.3	81.7
<b>Lumber and its products</b>	<b>92.1</b>	<b>82.8</b>	<b>83.8</b>	<b>84.0</b>	<b>100.0</b>	<b>89.5</b>	<b>92.7</b>	<b>92.7</b>
Lumber, sawmills	90.3	78.3	80.4	80.7	99.0	84.2	89.5	90.1
Lumber, millwork	98.7	89.0	89.0	89.9	106.8	95.0	96.8	97.5
Furniture	94.0	94.4	92.3	91.6	98.9	104.4	100.9	98.8
<b>Leather and its products</b>	<b>85.3</b>	<b>87.1</b>	<b>85.5</b>	<b>85.2</b>	<b>82.7</b>	<b>84.2</b>	<b>81.8</b>	<b>82.5</b>
Leather	86.7	88.8	87.4	87.5	89.0	89.9	88.4	89.1
Boots and shoes	84.8	86.6	84.9	84.4	80.2	81.9	79.2	79.9
<b>Paper and printing</b>	<b>102.5</b>	<b>103.6</b>	<b>102.8</b>	<b>102.4</b>	<b>110.8</b>	<b>113.0</b>	<b>112.6</b>	<b>111.0</b>
Paper and pulp	95.9	94.2	92.2	92.0	102.9	100.2	98.7	97.0
Paper boxes	97.7	95.3	94.4	94.5	104.9	105.0	104.2	102.8
Printing, book and job	102.8	104.1	103.6	103.2	113.3	115.9	115.2	114.4
Printing, newspapers	110.7	116.0	115.9	115.3	117.7	124.6	125.6	123.3
<b>Chemicals and allied products</b>	<b>93.7</b>	<b>105.2</b>	<b>94.3</b>	<b>90.3</b>	<b>100.0</b>	<b>109.5</b>	<b>100.2</b>	<b>100.0</b>
Chemicals	94.6	96.7	93.2	94.0	103.9	108.8	106.0	108.1
Fertilizers	74.8	142.3	89.9	65.6	83.0	144.9	95.2	76.0
Petroleum	100.9	100.3	97.6	96.2	100.4	100.4	95.2	97.9
<b>Stone, clay, and glass products</b>	<b>104.0</b>	<b>97.8</b>	<b>98.9</b>	<b>99.0</b>	<b>112.4</b>	<b>105.8</b>	<b>107.9</b>	<b>105.6</b>
Cement	95.6	88.2	90.4	92.3	103.8	94.8	101.8	100.0
Brick, tile, and terra cotta	108.5	99.7	104.0	104.1	116.5	104.2	112.3	110.8
Pottery	108.6	105.7	103.7	102.6	118.1	120.3	111.4	105.4
Glass	100.8	96.4	94.9	94.9	110.1	106.3	105.2	103.1
<b>Metal products, other than iron and steel</b>	<b>96.3</b>	<b>93.9</b>	<b>93.5</b>	<b>90.7</b>	<b>97.5</b>	<b>91.3</b>	<b>95.1</b>	<b>91.5</b>
Stamped and enameled ware	93.3	88.2	86.1	84.2	88.9	86.7	85.9	83.2
Brass, bronze, and copper products	97.7	96.5	96.8	93.7	100.7	93.0	98.5	94.6
<b>Tobacco products</b>	<b>86.7</b>	<b>81.6</b>	<b>82.4</b>	<b>84.6</b>	<b>88.6</b>	<b>79.0</b>	<b>84.6</b>	<b>87.8</b>
Chewing and smoking tobacco and snuff	93.9	90.6	89.0	89.2	101.7	91.3	94.4	98.9
Cigars and cigarettes	85.8	80.4	81.6	84.0	87.1	77.6	83.5	86.5

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—JUNE, 1926, AND APRIL, MAY, AND JUNE, 1927—Continued

Industry	Employment				Pay-roll totals			
	June, 1926	April, 1927	May, 1927	June, 1927	June, 1926	April, 1927	May, 1927	June, 1927
<b>Vehicles for land transportation.</b>	<b>92.1</b>	<b>86.8</b>	<b>86.9</b>	<b>85.1</b>	<b>94.7</b>	<b>93.1</b>	<b>94.2</b>	<b>85.8</b>
Automobiles	108.5	106.9	107.2	101.6	108.5	115.8	116.5	90.4
Carriages and wagons	87.5	73.3	74.1	70.5	90.8	80.8	80.4	70.3
Car building and repairing, electric-railroad	87.9	89.5	88.4	89.8	91.3	91.9	92.6	93.1
Car building and repairing, steam-railroad	82.0	74.2	74.3	74.7	86.2	78.9	80.4	78.8
<b>Miscellaneous industries.</b>	<b>94.8</b>	<b>101.8</b>	<b>100.3</b>	<b>98.7</b>	<b>100.3</b>	<b>113.3</b>	<b>109.3</b>	<b>104.9</b>
Agricultural implements	98.2	93.8	91.2	89.5	111.8	107.8	106.2	101.1
Electrical machinery, apparatus, and supplies	96.7	93.5	92.7	94.8	103.2	100.2	100.2	101.7
Pianos and organs	93.8	84.5	82.9	82.9	100.6	87.4	88.1	86.0
Rubber boots and shoes	86.2	86.4	87.0	86.5	89.5	97.5	100.6	97.4
Automobile tires	106.8	111.8	116.0	113.8	110.0	121.5	124.5	120.2
Shipbuilding, steel	89.8	107.4	103.2	99.7	95.3	119.5	110.9	103.7

Table 7 shows the general index of employment in manufacturing industries and the general index of pay-roll totals from January, 1923, to June, 1927.

Following Table 7 are graphs made from index numbers, showing clearly the course of employment for each month of 1926 and for each completed month of 1927. These charts make possible a comparison between corresponding months of the two years. The first chart represents the 54 separate industries combined and shows the course of pay-roll totals as well as the course of employment. The remaining charts show the trend of employment in each separate industry.

TABLE 7.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—JANUARY, 1923, TO JUNE, 1927

[Monthly average, 1923=100]

Month	Employment					Pay-roll totals				
	1923	1924	1925	1926	1927	1923	1924	1925	1926	1927
January	98.0	95.4	90.0	92.3	89.4	91.8	94.5	90.0	93.9	90.9
February	99.6	96.6	91.6	93.3	91.0	95.2	99.4	95.1	97.9	96.4
March	101.8	96.4	92.3	93.7	91.4	100.3	99.0	96.6	99.1	97.7
April	101.8	94.5	92.1	92.3	90.6	101.3	96.9	94.2	97.2	96.6
May	101.8	90.8	90.9	91.7	89.7	104.8	92.4	94.4	95.6	95.6
June	101.9	87.9	90.1	91.3	89.1	104.7	87.0	91.7	95.5	93.3
July	100.4	84.8	89.3	89.8	-----	99.9	80.8	89.6	91.2	-----
August	99.7	85.0	89.9	90.7	-----	99.3	83.5	91.4	94.6	-----
September	99.8	86.7	90.9	92.2	-----	100.0	86.0	90.4	95.1	-----
October	99.3	87.9	92.3	92.5	-----	102.3	88.5	96.2	98.6	-----
November	98.7	87.8	92.5	91.4	-----	101.0	87.6	96.2	96.4	-----
December	96.9	89.4	92.6	90.9	-----	98.9	91.7	97.3	95.6	-----
Average	100.0	90.3	91.3	91.0	1 90.3	100.0	90.6	93.6	95.8	1 95.1

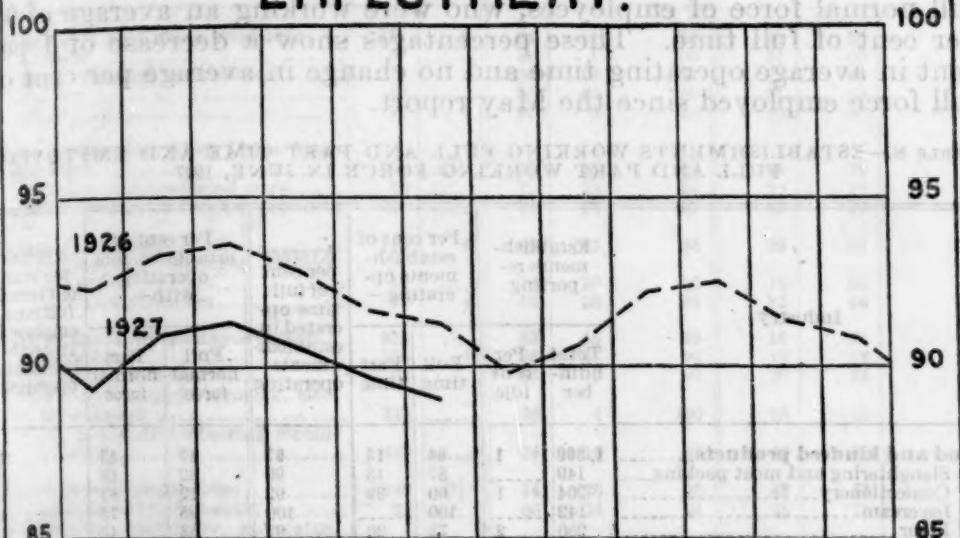
<sup>1</sup> Average for 6 months.

# MANUFACTURING INDUSTRIES.

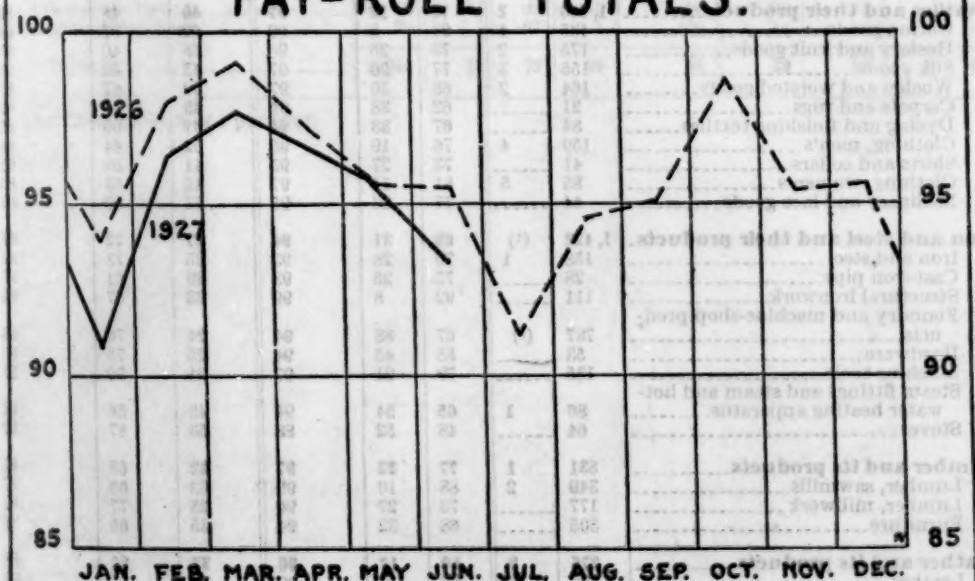
## MONTHLY INDEXES - 1926 & 1927.

MONTHLY AVERAGE 1923 = 100.

### EMPLOYMENT.



### PAY-ROLL TOTALS.



**Proportion of Time Worked and Force Employed in Manufacturing Industries in June, 1927**

**R**EPORTS from 8,049 establishments in June, 1927, show that 1 per cent of these establishments were idle, 79 per cent were operating on a full-time schedule, and 20 per cent on a part-time schedule; 39 per cent of the establishments had a full normal force of employees and 60 per cent were operating with reduced forces. The establishments in operation were employing an average of 87 per cent of a full normal force of employees, who were working an average of 96 per cent of full time. These percentages show a decrease of 1 per cent in average operating time and no change in average per cent of full force employed since the May report.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JUNE, 1927

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Food and kindred products</b>	1,309	1	84	15	97	47	53	99
Slaughtering and meat packing	149		87	13	99	32	68	92
Confectionery	204	1	60	39	92	12	87	69
Ice cream	142		100		100	25	75	84
Flour	260	2	73	26	91	53	45	92
Baking	546	(1)	94	6	99	66	34	97
Sugar refining, cane	8		63	38	90	13	88	75
<b>Textiles and their products</b>	1,363	2	79	19	97	50	48	90
Cotton goods	435	1	91	8	99	62	37	94
Hosiery and knit goods	175	2	73	26	96	58	40	87
Silk goods	155	3	77	20	97	45	52	93
Woolen and worsted goods	164	2	68	30	97	39	87	87
Carpets and rugs	21		62	38	95	43	57	92
Dyeing and finishing textiles	84		67	33	94	31	69	86
Clothing, men's	159	4	76	19	95	52	44	88
Shirts and collars	41		73	27	95	41	59	91
Clothing, women's	85	5	81	14	97	42	53	85
Millinery and lace goods	44		77	23	95	11	89	69
<b>Iron and steel and their products</b>	1,432	(1)	69	31	94	27	72	84
Iron and steel	158	1	70	28	93	25	73	83
Cast-iron pipe	28		75	25	93	39	61	87
Structural ironwork	111		92	8	99	33	67	83
Foundry and machine-shop products	787	(1)	67	33	94	24	76	83
Hardware	53		55	45	94	25	75	86
Machine tools	136		79	21	97	21	79	81
Steam fittings and steam and hot-water heating apparatus	86	1	65	34	94	43	56	94
Stoves	64		48	52	88	53	47	92
<b>Lumber and its products</b>	831	1	77	22	97	32	68	85
Lumber, sawmills	349	2	88	10	99	32	65	87
Lumber, millwork	177		73	27	96	23	77	81
Furniture	305		68	32	94	35	65	86
<b>Leather and its products</b>	376	2	86	17	96	32	66	88
Leather	96	3	89	8	99	35	61	89
Boots and shoes	180	2	76	22	95	31	68	87
<b>Paper and printing</b>	566	(1)	84	16	98	45	55	93
Paper and pulp	141	1	80	18	97	46	52	93
Paper boxes	122		67	33	94	19	81	85
Printing, book and job	170		88	12	99	46	54	93
Printing, newspapers	133		99	1	100	65	35	99
<b>Chemicals and allied products</b>	264	2	74	24	95	22	76	70
Chemicals	103	1	84	15	98	41	58	91
Fertilizers	119	3	56	40	92	7	90	45
Petroleum refining	42		98	2	100	21	79	87

<sup>1</sup> Less than one-half of 1 per cent.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JUNE, 1927—Continued

Industry	Establishments reporting		Per cent of establishments operating		Average per cent of full time operated in establishments operating	Per cent of establishments operating with		Average per cent of normal full force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Stone, clay, and glass products</b>	<b>477</b>	<b>1</b>	<b>84</b>	<b>14</b>	<b>97</b>	<b>37</b>	<b>62</b>	<b>90</b>
Cement	67		99	1	100	31	69	93
Brick, tile, and terra cotta	270	1	86	13	97	39	60	90
Pottery	49		55	45	89	31	69	89
Glass	91	4	87	9	96	40	56	88
<b>Metal products, other than iron and steel</b>	<b>164</b>		<b>74</b>	<b>26</b>	<b>97</b>	<b>24</b>	<b>76</b>	<b>84</b>
Stamped and enameled ware	40		75	25	96	30	70	85
Brass, bronze, and copper products	124		74	26	97	23	77	84
<b>Tobacco products</b>	<b>113</b>	<b>4</b>	<b>69</b>	<b>27</b>	<b>94</b>	<b>29</b>	<b>67</b>	<b>88</b>
Chewing and smoking tobacco and snuff	19		74	26	95	16	84	88
Cigars and cigarettes	94	4	68	28	94	32	64	88
<b>Vehicles for land transportation</b>	<b>975</b>	<b>(1)</b>	<b>85</b>	<b>15</b>	<b>98</b>	<b>46</b>	<b>54</b>	<b>89</b>
Automobiles	135	1	56	43	94	17	82	81
Carriages and wagons	53		83	17	97	26	74	76
Car building and repairing, electric-railroad	339		96	4	100	65	35	96
Car building and repairing, steam-railroad	448		84	16	98	42	58	87
<b>Miscellaneous industries</b>	<b>289</b>	<b>(1)</b>	<b>74</b>	<b>26</b>	<b>96</b>	<b>43</b>	<b>57</b>	<b>82</b>
Agricultural implements	62		66	34	94	23	77	78
Electrical machinery, apparatus, and supplies	126		79	21	96	65	35	81
Pianos and organs	23		61	39	90	22	78	85
Rubber boots and shoes	9		56	44	95	44	56	99
Automobile tires	40	3	63	35	96	35	63	89
Shipbuilding, steel	29		97	3	100	14	86	81
<b>Total</b>	<b>8,049</b>	<b>1</b>	<b>79</b>	<b>20</b>	<b>96</b>	<b>39</b>	<b>60</b>	<b>87</b>

<sup>1</sup> Less than one-half of 1 per cent.

## Employment and Pay-Roll Totals on Class I Railroads, May, 1926, and April and May, 1927

**T**HE number of employees on the 15th of May, 1927, and the total earnings of employees in the entire month of May, 1927, on Class I railroads of the United States, are shown in the table following, together with similar information for April, 1927, and May, 1926. The data are presented for all occupations combined, excluding executives and officials, and also for the six general groups of occupations; under each group data are shown separately for a few of the more important occupations.

Class I railroads are roads having operating revenues of \$1,000,000 a year and over.

**EMPLOYMENT AND TOTAL EARNINGS OF RAILROAD EMPLOYEES—MAY, 1926,  
AND APRIL AND MAY, 1927**

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups.]

Occupation	Number of employees at middle of month			Amount of pay roll in one month		
	May, 1926	April, 1927	May, 1927	May, 1926	April, 1927	May, 1927
<b>Professional, clerical, and general</b>						
Clerks	284,083	282,196	281,783	\$38,854,648	\$39,224,304	\$39,346,160
Stenographers and typists	166,790	164,204	164,019	21,591,825	21,579,745	21,671,255
	25,422	25,437	25,265	3,104,449	3,175,266	3,149,697
<b>Maintenance of way and structures</b>	436,542	416,782	457,387	40,171,898	39,397,041	42,427,791
Laborers, extra gang and work train	73,169	66,760	80,795	5,841,736	5,253,758	6,408,603
Laborers, track and roadway section	225,937	215,914	239,430	16,603,470	16,261,270	17,629,536
<b>Maintenance of equipment and stores</b>	516,302	494,127	490,133	67,014,934	65,208,651	65,260,939
Carmen	111,985	105,688	140,958	16,394,762	15,786,687	15,853,522
Machinists	60,604	59,158	58,747	9,511,866	9,399,589	9,392,699
Skilled trades, helpers	113,600	108,344	107,529	12,407,083	12,132,497	12,141,301
Laborers (shops, engine houses, power plants, and stores)	42,450	41,658	41,460	4,060,149	3,921,508	4,009,640
Common laborers (shops, engine houses, power plants, and stores)	60,085	56,376	55,915	4,857,801	4,589,919	4,565,934
<b>Transportation, other than train, engine, and yard</b>	207,414	205,485	205,404	25,398,249	25,108,702	25,522,880
Station agents	30,675	30,437	30,412	4,746,761	4,712,432	4,751,148
Telegraphers, telephoners, and towermen	25,615	24,938	24,818	3,881,068	3,753,778	3,847,796
Truckers (stations, warehouses, and platforms)	38,559	38,341	37,882	3,575,159	3,522,971	3,521,389
Crossing and bridge flagmen and gatemen	22,340	21,927	21,974	1,684,452	1,682,510	1,695,323
<b>Transportation yardmasters, switch tenders, and hostlers</b>	24,014	23,456	23,318	4,490,318	4,399,867	4,482,538
<b>Transportation, train and engine</b>	323,567	319,483	318,157	63,128,086	62,863,763	64,388,006
Road conductors	36,757	36,142	36,153	8,513,154	8,546,513	8,807,674
Road brakemen and flagmen	73,998	72,721	73,057	12,531,404	12,474,748	12,842,729
Yard brakemen and yard helpers	53,979	53,239	52,620	9,004,698	9,119,362	9,358,681
Road engineers and motormen	43,504	43,041	43,024	11,434,782	11,021,326	11,359,576
Road firemen and helpers	45,003	44,063	44,065	8,493,369	8,405,637	8,651,282
<b>All occupations</b>	1,791,923	1,741,509	1,776,162	239,058,065	236,000,227	241,428,333

## State Reports on Employment

## California

THE following data, taken from the June, 1927, Labor Market Bulletin, issued by the Bureau of Labor Statistics of California, show changes in volume of employment and pay roll from May, 1926, to May, 1927, in 795 establishments in that State:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 795 CALIFORNIA ESTABLISHMENTS BETWEEN MAY, 1926, AND MAY, 1927

Industry	Number of establish- ments reporting	Employees		Weekly pay roll	
		Number in May, 1927	Per cent of change as com- pared with May, 1926	Amount in May, 1927	Per cent of change as com- pared with May, 1926
<b>Stone, clay, and glass products:</b>					
Miscellaneous stone and mineral products	14	1,674	+3.8	\$51,714	-1.7
Lime, cement, plaster	8	2,089	-1.6	66,821	+1.1
Brick, tile, pottery	18	2,907	+26.5	77,932	+22.2
Glass	10	896	+3.3	29,699	+4.2
Total	50	7,566	+9.7	226,166	+7.2
<b>Metals, machinery, and conveyances:</b>					
Agricultural implements	6	1,633	-8.5	46,037	-8.7
Automobiles, including bodies and parts	15	2,823	-18.6	90,500	-21.4
Brass, bronze, and copper products	9	994	-6.9	26,443	-14.3
Engines, pumps, boilers, and tanks	8	971	-9.5	32,548	-14.6
Iron and steel forgings, bolts, nuts, etc.	7	2,403	-9.4	82,136	-2.4
Structural and ornamental steel	20	4,939	+4.2	168,850	+17.3
Ship and boat building and naval repairs	6	6,638	+38.1	231,532	+45.4
Tin cans	8	2,365	-1.1	67,948	+3.7
Other iron foundry and machine-shop products	75	7,466	-2.6	239,552	-6
Other sheet-metal products	21	1,621	+7.3	52,815	+17.4
Cars, locomotives, and railway repair shops	17	8,905	+8.7	277,661	+10.5
Total	192	40,758	+3.6	1,316,112	+7.4
<b>Wood manufactures:</b>					
Sawmills and logging	24	11,436	-10.8	310,732	-10.9
Planing mills, sash and door factories, etc.	59	10,488	-7.3	291,747	-8.9
Other wood manufactures	46	5,316	+2.5	151,380	+6.8
Total	129	27,240	-7.1	753,859	-7.0
<b>Leather and rubber goods:</b>					
Tanning	8	849	+4.7	24,536	+7.1
Finished leather products	5	451	-7.4	10,522	+2.3
Rubber products	7	2,902	+10.1	89,445	+26.9
Total	20	4,202	+6.8	124,503	+20.1
<b>Chemicals, oils, paints, etc.:</b>					
Explosives	4	490	-6.8	14,835	-2.2
Mineral oil refining	7	11,145	-6.6	490,021	+10.7
Paints, dyes, and colors	8	664	-4.3	17,075	-3.6
Miscellaneous chemical products	14	1,975	+6.3	55,637	+11.7
Total	33	14,274	-4.9	557,568	+9.9
<b>Printing and paper goods:</b>					
Paper boxes, bags, cartons, etc.	14	2,066	-1.2	54,314	+1.0
Printing	59	2,564	+7	92,847	+7
Publishing	18	3,909	-5	152,459	+2.5
Other paper products	9	1,075	+8.7	26,853	+10.7
Total	100	9,614	+6	326,473	+2.4

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF  
WEEKLY PAY ROLL IN 795 CALIFORNIA ESTABLISHMENTS BETWEEN MAY, 1927,  
AND MAY, 1926—Continued

Industry	Number of establish- ments reporting	Employees		Weekly pay roll	
		Number in May, 1927	Per cent of change as com- pared with May, 1926	Amount in May, 1927	Per cent of change as com- pared with May, 1926
Textiles:					
Knit goods	13	1,212	+12.7	27,750	+32.7
Other textile products	6	1,587	+5.5	36,110	+2.9
Total	19	2,799	+5.5	63,860	+14.0
Clothing, millinery, and laundering:					
Men's clothing	25	2,944	+1.4	64,763	+2.6
Women's clothing	9	787	-1.5	18,278	-2.6
Millinery	7	698	+8.2	12,957	+3.2
Laundering, cleaning, and dyeing	21	3,274	+5.3	74,985	+3.9
Total	62	7,703	+3.3	168,983	+2.7
Foods, beverages, and tobacco:					
Canning, preserving of fruits and vegetables	35	7,990	-18.6	158,081	-10.7
Canning, packing of fish	4	371	+157.6	4,529	+82.3
Confectionery and ice cream	26	1,622	-1.4	39,405	-4.9
Groceries, n. e. s.	6	513	-8.4	12,872	-3.5
Bread and bakery products	23	3,750	-3.4	108,937	+7.7
Sugar	6	2,885	-2.4	85,852	+2.3
Slaughtering and meat products	13	2,250	0	67,490	+4.5
Cigars and other tobacco products	5	966	-8.4	18,159	-6.6
Beverages	3	401	-6.3	11,835	-4.1
Dairy products	11	2,873	+12.1	97,334	+16.7
Flour and grist mills	14	1,055	-7	29,291	-4.7
Ice manufactures	15	1,145	-8.7	39,020	-3.2
Other food products	12	835	+4.5	18,266	-3
Total	173	26,656	-6.2	691,071	-7
Water, light, and power	5	7,516	-16.4	230,750	-13.0
Miscellaneous	12	2,054	-5.3	55,776	+8.1
Grand total, all industries	795	150,382	-2.2	4,535,121	+2.4

## Iowa

THE June, 1927, issue of the Iowa Employment Survey, published by the bureau of labor of that State, shows the following changes in volume of employment from May to June, 1927:

## CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, MAY TO JUNE, 1927

Industry	Number of firms reporting	Employees on pay roll, June, 1927		Industry	Number of firms reporting	Employees on pay roll, June, 1927	
		Number	Per cent of change as compared with May, 1927			Number	Per cent of change as compared with May, 1927
Food and kindred products:				Leather products:			
Meat packing	9	8,472	+8.5	Shoes	2	245	+.8
Cereals	2	1,115	+10.1	Saddlery and harness	4	124	-18.4
Flour	3	115	+25.0	Fur goods and tanning	4	94	+4.4
Bakery products	9	990	-.7	Gloves and mittens	2	166	.0
Confectionery	4	255	+55.5	Total	12	629	-4.9
Poultry, produce, butter, etc.	8	1,232	+.4	Paper products, printing and publishing:			
Sugar, starch, sirup, glucose, etc.	3	1,573	+10.2	Paper products	4	337	+1.2
Other food products, coffee, etc.	10	310	-4.9	Printing and publishing	15	2,721	+.9
Total	48	14,062	+7.7	Total	19	3,058	+.9
Textiles:				Patent medicines, chemicals and compounds	8	359	+3.2
Clothing, men's	11	1,109	+4.9	Stone and clay products:			
Millinery	2	109	.0	Cement, plaster, gypsum	7	2,267	-2.6
Clothing, women's, and woolen goods	3	574	+7.1	Brick and tile	10	999	+1.2
Hosiery, awnings, etc.	4	709	+1.1	Marble and granite, crushed rock, and stone	4	107	.0
Buttons, pearl	8	657	-6.0	Total	21	3,373	-1.4
Total	28	3,158	+1.8	Tobacco and cigars	3	285	-----
Iron and steel works:				Railway car shops	7	9,032	-1.2
Foundry and machine shops	25	3,066	+.3	Various industries:			
Brass, bronze products, plumbers' supplies	6	698	+8.6	Auto tires and tubes	2	145	+2.1
Autos, tractors, and engines	6	2,260	-1.1	Brooms and brushes	5	168	+4.3
Furnaces	7	463	-8.7	Laundries	4	191	-2.1
Pumps	4	362	-7.7	Mercantile	7	2,797	-3.9
Agricultural implements	9	1,056	+3.8	Public service	5	4,005	-.4
Washing machines	8	2,306	-.3	Seeds	2	465	-1.5
Total	65	10,214	.0	Wholesale houses	25	1,295	-1.5
Lumber products:				Commission houses	9	357	+25.7
Millwork, interiors, etc.	15	1,635	+3.0	Other industries	7	1,101	+2.8
Furniture, desks, etc.	8	1,028	+1.0	Total	66	10,524	-.4
Refrigerators	3	125	-27.3	Grand total	310	157,707	+1.6
Coffins, undertakers' supplies	4	139	-8.6				
Carriages, wagons, truck bodies	3	86	+10.3				
Total	33	3,013	+.2				

<sup>1</sup> As shown in the report, but is not the correct sum of the items.

## Maryland

THE following report on volume of employment in Maryland from May to June, 1927, was furnished by the commissioner of labor and statistics of Maryland:

## CHANGES IN EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND IN JUNE, 1927

Industry	Establishments reporting for both months	Employment		Pay roll	
		Number of employees, June, 1927	Per cent of change as compared with May, 1927	Amount, June, 1927	Per cent of change as compared with May, 1927
Bakery	3	382	+6.1	\$9,432	+2.5
Beverages and soft drinks	3	174	+6.7	4,734	-8
Boots and shoes	7	1,190	-3.4	20,954	-1.7
Boxes, fancy and paper	7	371	-2.9	5,197	+3.4
Boxes, wooden	3	183	-9.0	3,234	-8.0
Brass and bronze	3	2,101	-10.3	51,400	-9.9
Brick, tile, etc.	4	714	-7.3	18,992	-7.2
Brushes	5	620	+4	12,028	+2.2
Car building and repairing	3	315	-7.7	11,178	-1.8
Chemicals	6	1,137	+1.7	31,028	-6
Clothing, men's outer garments	4	2,011	+10.7	39,921	+51.2
Clothing, women's outer garments	5	824	-2.8	9,861	-14.0
Confectionery	6	736	+13.0	8,608	-10.9
Cotton goods	5	2,071	-2.1	34,269	+7
Fertilizer	4	566	-33.6	13,920	-24.6
Foundry	9	1,105	+1.7	32,614	+10.9
Furnishing goods, men's	5	1,040	+2.8	14,088	+7
Furniture	11	808	-4.9	20,573	-1.4
Glass manufacture	4	1,162	-4.6	25,067	-5.5
Ice cream	3	182	+4.5	5,271	+1.1
Leather goods	5	663	+2.7	13,804	+9.4
Lithographing	3	509	+1.1	15,893	+3.1
Lumber and planing	6	576	+3.9	14,749	+5.0
Mattresses and spring beds	4	184	+26.8	4,916	+52.8
Plumbers' supplies	4	1,282	-8.3	34,758	-12.0
Printing	10	1,358	+5	47,316	-1.8
Rubber tire manufacture	1	3,306	-3.5	188,464	-5.7
Shipbuilding	3	674	+22.9	17,294	+12.4
Shirts	4	523	-14.0	6,811	-17.4
Silk goods	3	492	-12.2	7,886	-6.2
Stamping and enameling ware	4	1,189	+2.5	20,724	+1.6
Tinware	4	2,486	-5	55,752	+2.8
Tobacco	7	861	+8	12,885	-2
Umbrellas	3	300	-4.5	5,311	+10.4
Miscellaneous	16	5,357	-4.8	100,695	-2.7

## Massachusetts

A PRESS release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in various industries in that State from April, 1927, to May, 1927:

NUMBER OF EMPLOYEES IN 1,036 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO APRIL 15 AND MAY 15, 1927

Industry	Number of estab- lishments	Number of wage earners employed		
		April, 1927	May, 1927	
			Full time	Part time
Bookbinding	15	925	799	114
Boot and shoe cut stock and findings	43	2,234	1,884	285
Boots and shoes	83	24,535	13,447	9,879
Boxes, paper	27	2,015	1,162	840
Boxes, wooden packing	11	890	636	263
Bread and other bakery products	49	4,364	4,206	98
Carpets and rugs	5	3,656	3,627	—
Cars and general shop construction and repairs, steam railroads	4	2,937	—	2,842
Clothing, men's	28	4,273	2,885	1,319
Clothing, women's	34	1,593	1,337	309
Confectionery	18	3,451	2,608	833
Copper, tin, sheet iron, etc.	15	470	408	8
Cotton goods	54	41,041	37,334	3,140
Cutlery and tools	20	2,105	1,319	967
Dyeing and finishing textiles	10	6,827	6,449	404
Electrical machinery, apparatus, and supplies	15	9,440	8,910	578
Foundry products	26	2,685	1,811	874
Furniture	36	3,880	2,796	892
Gas and by-products	13	1,200	1,155	53
Hosiery and knit goods	12	4,881	3,117	1,734
Jewelry	33	2,274	1,288	935
Leather, tanned, curried, and finished	32	6,271	5,927	212
Machine-shop products	45	6,144	5,188	750
Machine and other tools	27	2,787	1,975	743
Motor vehicles, bodies, and parts	16	4,372	4,405	5
Musical instruments	13	1,117	638	465
Paper and wood pulp	26	6,462	4,509	1,955
Printing and publishing, book and job	51	4,244	4,010	194
Printing and publishing, newspaper	18	2,347	2,228	136
Rubber footwear	3	8,628	7,143	1,494
Rubber goods	7	2,751	2,745	7
Silk goods	10	4,234	1,728	2,459
Slaughtering and meat packing	5	1,471	265	1,204
Stationery goods	12	1,673	1,612	57
Steam fittings and steam and hot-water heating apparatus	9	1,770	1,718	47
Stoves and stove linings	5	1,443	37	1,434
Textile machinery and parts	13	4,384	2,000	1,987
Tobacco	5	611	69	551
Woolen and worsted goods	59	19,280	11,656	6,909
All other industries	129	31,407	25,032	5,873
Total, all industries	1,036	237,072	180,153	52,908
				233,061

## New Jersey

THE New Jersey Department of Labor has furnished the following data showing the changes in volume of employment and pay roll from April to May, 1927, in 867 establishments in that State:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 867 NEW JERSEY ESTABLISHMENTS, MAY, 1927, COMPARED WITH APRIL, 1927

Industry	Number of plants reporting	Employees		Weekly pay roll	
		Number in May, 1927	Per cent of change as compared with April, 1927	Amount in May, 1927	Per cent of change as compared with April, 1927
<b>Food and kindred products:</b>					
Baking	16	1,383	+0.1	\$46,075	-5.2
Canning and preserving	8	4,009	-4.6	83,224	-3.0
Confectionery and ice cream	7	318	-2.8	7,189	-3.3
Provisions	3	1,314	+2.3	39,449	+1.0
Other food products	12	2,671	+0.9	76,174	+1.5
Total	46	9,695	-1.5	252,111	-1.5
<b>Textiles and their products:</b>					
Carpets and rugs	3	1,199	+0.3	36,644	+10.3
Clothing	30	4,186	-1.1	85,153	-
Cotton goods	15	7,299	-2.8	143,747	-5.6
Dyeing and finishing textiles	38	11,611	-4.1	294,560	-4.5
Hats and caps	6	1,089	-2.1	29,239	+15.1
Hosiery and knit goods	17	3,864	-1.1	111,559	+1.6
Millinery and lace	10	934	-8.7	17,377	-8.2
Shirts and collars	9	2,191	-0.2	39,494	-2.0
Silk goods	58	9,304	-2.7	233,851	-5.2
Woolen and worsted goods	17	7,428	-4.5	185,881	-4.3
Miscellaneous textile products	10	1,926	-5.9	43,725	-4.8
Total	213	50,941	-3.1	1,221,230	-3.1
<b>Iron and steel and their products:</b>					
Cast-iron pipe	6	3,223	-6.8	104,491	+0.4
Electrical machinery, apparatus, and supplies	29	20,268	-2.0	554,187	-4.3
Foundry and machine-shop products	79	18,201	-1.8	546,591	-1.9
Hardware	7	935	-3.0	27,598	-2.2
Iron and steel forgings	8	782	-3.4	23,936	-5.4
Machine tools	22	3,674	+5.7	104,950	-0.9
Steam fittings and steam and hot-water heating apparatus	13	3,676	-1.1	112,037	-3.7
Structural ironwork	10	1,642	-3.1	49,352	+2.0
Total	174	52,401	-1.9	1,523,142	-2.7
<b>Lumber and its products:</b>					
Furniture	5	1,284	-1.4	87,292	-3.7
Lumber and millwork	14	696	-1.3	20,125	-1.3
Total	19	1,980	-1.3	57,417	-2.9
<b>Leather and its products:</b>					
Boots and shoes	7	1,149	-2.9	27,966	-3.5
Leather	22	3,455	-0.7	101,771	+0.4
Leather products	4	506	+1.0	11,576	-8.0
Total	33	5,110	-1.1	141,313	-1.1
<b>Tobacco products</b>					
	12	3,197	+6.6	57,614	+17.7
<b>Paper and printing:</b>					
Paper and pulp	24	4,115	-4.8	113,442	-5.0
Paper boxes	18	1,521	+2.4	31,767	-2.1
Printing, book and job	12	2,163	+3.0	67,770	-0.7
Printing, newspaper	10	2,003	+0.6	84,932	+1.3
Total	64	9,802	-0.8	297,911	-2.0

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PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF  
WEEKLY PAY ROLL IN 867 NEW JERSEY ESTABLISHMENTS, MAY, 1927, COMPARED  
WITH APRIL, 1927—Continued

Industry	Number of plants reporting	Employees		Weekly pay roll	
		Number in May, 1927	Per cent of change as com- pared with April, 1927	Amount in May, 1927	Per cent of change as com- pared with April, 1927
Chemicals and allied products:					
Chemicals.....	42	9,106	-5.2	257,421	-6.7
Explosives.....	6	2,150	-0.3	63,034	-1.9
Oils and greases.....	9	1,540	-15.0	44,003	-14.0
Paints and varnishes.....	13	1,836	+9.9	57,556	+9.0
Petroleum refining.....	8	13,822	-9.8	453,679	-17.1
Total.....	78	28,454	-6.9	875,603	-11.7
Stone, clay, and glass products:					
Brick, tile, and terra cotta.....	26	4,428	+3.6	130,242	+2.4
Glass.....	7	3,262	-2.6	70,177	-4.1
Pottery.....	22	4,726	-1.1	137,504	-2.9
Other products.....	2	928	+0.5	36,389	-1.3
Total.....	57	13,344	+0.1	374,312	-1.2
Metal products, other than iron and steel:					
Brass, bronze, and copper products.....	11	645	+2.9	18,328	-13.4
Sheet metal and enamel ware.....	23	4,525	-1.2	122,438	+0.2
Smelting and refining.....	9	3,647	-1.8	115,626	-3.0
Wire and wire goods.....	15	7,680	-3.1	215,907	-5.9
Total.....	58	16,497	-2.1	472,209	-4.0
Vehicles for land transportation:					
Automobiles and parts.....	13	6,030	+1.6	195,012	+2.1
Car building and repairing, steam railroad.....	9	4,715	+0.4	145,067	+12.8
Total.....	22	10,745	+1.1	340,079	+6.4
Miscellaneous industries:					
Cork and cork specialties.....	5	1,706	-2.1	47,558	+3.0
Jewelry and novelties.....	29	3,939	-0.9	118,632	-3.2
Laundries.....	8	929	-0.3	19,087	+0.8
Musical instruments.....	4	7,846	-5.6	224,011	-9.0
Rubber tires and goods.....	30	9,804	-0.8	274,495	-1.4
Shipbuilding.....	6	6,346	-8.3	205,353	-1.0
Unclassified.....	9	3,548	-4.1	101,194	-7.3
Total.....	91	34,208	-3.8	990,360	-3.8
Total, all industries.....	867	236,374	-2.7	6,603,481	-3.5

## Pennsylvania

THE Bureau of Statistics of the Department of Labor and Industry of Pennsylvania furnished the following report on changes in employment, in weekly man-hours and in pay-roll totals in Pennsylvania from May to June, 1927:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MAN-HOURS, AND IN WEEKLY PAY ROLL IN 465 PENNSYLVANIA ESTABLISHMENTS BETWEEN MAY AND JUNE, 1927

Industry	Number of plants reporting	Number of wage earners, week ending—		Total weekly man-hours, week ending—		Total weekly pay roll: Per cent of change, May to June, 1927
		June 15, 1927	Per cent of change as compared with May, 1927	June 15, 1927	Per cent of change as compared with May, 1927	
<b>Metal manufactures:</b>						
Automobiles, bodies, and parts.....	15	9,704	-17.4	456,582	-25.7	-26.1
Car construction and repair.....	12	7,260	-.5	310,931	+1.5	-1.4
Electrical machinery and apparatus.....	14	4,417	+9.8	211,294	+17.4	+20.2
Engines, machines, and machine tools.....	31	9,513	+.1	462,575	-.9	-.8
Foundries and machine shops.....	43	7,878	-1.1	367,790	-1.8	-.9
Heating appliances and apparatus.....	6	1,743	+2.3	81,379	-.1	.4
Iron and steel blast furnaces.....	9	8,260	-2.2	413,578	+.1	-.3
Iron and steel forgings.....	6	1,445	+14.7	63,275	+40.4	+55.2
Steel works and rolling mills.....	23	33,600	-.9	1,536,192	-3.3	-3.7
Structural iron works.....	11	1,873	+3.2	91,710	+4.2	+4.1
Miscellaneous iron and steel products.....	17	10,784	-1.7	520,836	+1.9	+.3
Shipbuilding.....	3	4,702	-8.0	211,704	-5.1	-4.1
Hardware.....	6	1,176	-.7	55,749	-3.7	-2.5
Nonferrous metals.....	7	764	+3.7	37,203	+3.2	+3.2
<b>Total</b> .....	263	103,119	-2.4	4,820,798	-3.3	-3.7
<b>Textile products:</b>						
Carpets and rugs.....	6	1,997	-4.8	98,500	-5.5	-7.0
Clothing.....	8	486	+2.1	21,758	-4.1	-8.9
Cotton goods.....	11	1,192	-.7	57,802	+4.4	-.1
Silk goods.....	22	8,633	-6.7	353,157	-11.2	-8.8
Woolens and worsteds.....	8	2,164	-1.2	95,800	-6.6	-7.6
Knit goods and hosiery.....	12	5,380	-2.3	195,343	-5.1	-14.1
Dyeing and finishing textiles.....	5	660	-6.4	29,087	+2.2	-4.7
<b>Total</b> .....	72	20,512	-4.3	851,537	-7.4	-9.5
<b>Foods and tobacco:</b>						
Bakeries.....	18	1,653	+3.4	86,630	+3.4	+2.0
Confectionery and ice cream.....	12	2,827	+4.4	163,459	+16.8	+12.3
Slaughtering and meat packing.....	9	1,249	+1.8	64,105	-2.9	-.2
Cigars and tobacco.....	7	308	+7.3	13,053	+6.0	+3.8
<b>Total</b> .....	46	6,037	+3.7	327,247	+8.3	+6.1
<b>Building materials:</b>						
Brick, tile, and terra-cotta products.....	15	2,722	+1.3	125,406	-1.6	+.3
Cement.....	7	4,050	+1.3	247,678	+4.9	+5.8
Glass.....	13	4,665	-1.6	196,660	-8.7	-8.3
<b>Total</b> .....	35	11,437	+.1	569,744	-1.6	-1.0
<b>Construction and contracting:</b>						
Buildings.....	17	1,471	+6.0	58,631	+5.5	+6.2
Street and highway.....	4	1,974	+21.1	89,964	+14.2	+20.1
General.....	10	1,954	+13.1	95,356	+16.7	+31.4
<b>Total</b> .....	31	5,399	+13.8	243,951	+12.9	+18.8

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MAN-HOURS, AND IN WEEKLY PAY ROLL IN 465 PENNSYLVANIA ESTABLISHMENTS BETWEEN MAY AND JUNE, 1927—Continued

Industry	Number of plants reporting	Number of wage earners, week ending—		Total weekly man-hours, week ending—		Total weekly pay roll: Per cent of change, May to June, 1927
		June 15, 1927	Per cent of change as compared with May, 1927	June 15, 1927	Per cent of change as compared with May, 1927	
Chemicals and allied products:						
Chemicals and drugs	11	807	+2.8	46,258	+4.0	+2.8
Paints and varnishes	6	978	-2.7	49,510	+4.4	+4.3
Total	17	1,785	-3	95,768	+4.2	+3.6
Miscellaneous industries:						
Lumber and planing-mill products	18	1,184	+4.8	53,976	+4.4	+7.1
Furniture	16	1,579	+12.5	74,895	+10.8	+14.0
Leather tanning	9	2,081	+1.3	103,181	+1	-6
Leather products	4	112	-1.8	5,195	0	+2.0
Boots and shoes	9	1,275	-15.8	53,230	-25.3	-25.5
Paper and pulp products	11	2,725	-1.1	144,754	-2.7	-9
Printing and publishing	22	1,448	+6.7	63,000	+1.4	-2
Rubber tires and goods	3	901	-3	45,071	-2.9	-7
Total	92	11,305	+6	543,401	-2.3	-6
All industries	465	154,195	-2.0	7,208,495	-3.1	-3.5

### Wisconsin

THE June, 1927, issue of the Wisconsin Labor Market, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in May, 1927:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM MAY, 1926, AND APRIL, 1927, TO MAY, 1927

Industry	Per cent of change			
	April, 1927, to May, 1927		May, 1926, to May, 1927	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture	+1.2	+1.7	+17.6	+3.7
Logging	+7	+11.7	-5.9	+1.0
Mining	+6	-6.0	+5.8	+6.8
Lead and zinc	-2	-7.9	+8.3	+12.1
Iron	+2.5	-1.7	+5	-3.0
Stone crushing and quarrying	+11.9	+15.3	+20.6	+14.2
Manufacturing	-1.8	-3.3	-5.5	-8.8
Stone and allied industries	+22.4	+21.3	-9.3	-7.7
Brick, tile, and cement blocks	+75.9	+74.3	-4	-15.4
Stone finishing	-3	+0.3	-15.0	-4.6
Metal	-4.1	-7.7	-11.4	-18.8
Pig iron and rolling mill products	-11.8	-14.9	-26.8	-28.6
Structural iron work	-0	-4.9	-5.0	-14.2
Foundries and machine shops	-3.1	-4.6	-1.5	-3
Railroad repair shops	+1.2	-1.7	+7	+1.2
Stoves	-5.9	-9.7	-22.4	-31.3
Aluminum and enamelware	-6.1	-14.9	+4.4	+2.5
Machinery	-5.5	-12.8	-17.5	-19.6
Automobiles	-6.5	-5.3	-28.5	-50.8
Other metal products	-3.3	-9.2	-6.2	-14.9
Wood	-3.3	-4.3	-6.6	-6.1
Sawmills and planing mills	-4.3	-6.8	-10.7	-10.0
Box factories	-16.4	-26.7	-20.0	-24.1
Panel and veneer mills	-8	-5.6	-10.7	-12.1
Furniture	-3.2	-1.6	-4.9	-2.3
Sash, door, and interior finish	-4	-0	+1.3	+3
Other wood products	-4.2	-3.0	-6.2	-5.8
Rubber	+3.2	-1.6	+21.8	+31.5
Leather	-3.0	+2	-18.5	-21.9
Tanning	-5.9	+8	-43.0	-43.8
Boots and shoes	-3.9	-7	-6.0	-8.8
Other leather products	+1.3	+1.0	+1.6	+2.0
Paper	-2.4	-5.3	-5	-3.6
Paper and pulp mills	-3.9	-8.0	-1.8	-6.7
Paper boxes	+9	+4.5	+8.2	+0.9
Other paper products	+2.1	+1.5	-1.3	+2.7
Textiles	+4.0	+13.7	+5	+4.2
Hosiery and other knit goods	+1	-6	-2.1	+3.1
Clothing	+13.9	+51.4	-1.7	+4
Other textile products	-7	+2	+16.7	+20.5
Foods	-9	+4	+3.6	+6.9
Meat packing	+6.0	+2.2	+19.3	+23.9
Baking and confectionery	-1.3	+13.3	-1.8	+9
Milk products	+2	-4.5	+18.3	+9.7
Canning and preserving	-3.0	-8.4	-25.3	-22.6
Flour mills	+2.4	-1	-7	-17.5
Tobacco manufacturing	-11.7	-14.4	-6	+45.5
Other food products	-2.6	-5.2	+2.7	+2.7
Light and power	+5.1	+4.2	+12.5	+11.2
Printing and publishing	+2	+3	+5.3	+8.6
Laundering, cleaning, and dyeing	+4	-6.6	+2.2	-6.9
Chemical (including soap, glue, and explosives)	-1.2	-3	-14.1	-13.5
Construction:				
Building	+7.6	+27.5	-5.1	+8.4
Highway	+45.2	+49.3	-8.0	-5.6
Railroad	+5.1	+8.4	-5.9	-9.7
Marine, dredging, sewer digging	+40.1	+52.0	+5.8	+6.5
Communication:				
Steam railways	+6.7	+5.3	-4.4	+1.8
Electric railways	+16.2	+8.0	+5.9	+6.0
Express, telephone, and telegraph	+8.7	+3.4	+1.8	+2.8
Wholesale trade	+2.3	-1.4	+1.7	+9.1
Hotels and restaurants	+1		+6.1	
<i>Nonmanual</i>				
Manufacturing, mines, and quarries	+6	+1.6	+5.8	+8.8
Construction	+7	+1.0	+1.3	+8.3
Communication	+7	-2	-2.0	+2.8
Wholesale trade	+8	-2.2	-10.1	-4.2
Retail trade—Sales force only	+1.2	+7	+14.5	+2.0
Miscellaneous professional services	-7	+5.2	+8.3	+7.5
Hotels and restaurants	+8		+3	

# WHOLESALE AND RETAIL PRICES

## Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices<sup>1</sup> received by the Bureau of Labor Statistics from retail dealers:

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JUNE 15, 1927, COMPARED WITH MAY 15, 1927, AND JUNE 15, 1926

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (-) June 15, 1927, compared with—	
		June 15, 1926	May 15, 1927	June 15, 1927	June 15, 1926	May 15, 1927
Sirloin steak.....	Pound.....	Cents 42.0	Cents 42.3	Cents 42.4	+1	+0.2
Round steak.....	do.....	36.2	36.9	37.0	+2	+0.3
Rib roast.....	do.....	30.6	31.2	31.1	+2	-0.3
Chuck roast.....	do.....	22.7	23.5	23.5	+4	0
Plate beef.....	do.....	14.6	15.2	15.2	+4	0
Pork chops.....	do.....	42.0	36.4	34.7	-17	-5
Bacon.....	do.....	51.5	47.6	47.1	-9	-1
Ham.....	do.....	59.7	56.3	55.5	-7	-1
Lamb, leg of.....	do.....	41.9	41.0	41.0	+2	0
Hens.....	do.....	40.2	38.4	36.3	-10	-5
Salmon, canned, red.....	do.....	38.1	32.5	32.8	-15	-1
Milk, fresh.....	Quart.....	13.8	13.9	13.9	+1	0
Milk, evaporated.....	15-16 oz. can.....	11.5	11.5	11.5	0	0
Butter.....	Pound.....	50.3	53.4	51.8	+3	-3
Oleomargarine (all butter substitutes).....	do.....	30.1	28.4	28.2	-6	-1
Cheese.....	do.....	35.7	37.0	37.0	+4	0
Lard.....	do.....	22.6	19.0	18.8	-17	-1
Vegetable lard substitute.....	do.....	25.8	25.0	25.1	-3	+0.4
Eggs, strictly fresh.....	Dozen.....	40.7	33.6	33.5	-18	-0.3
Bread.....	Pound.....	9.4	9.4	9.3	-1	-1
Flour.....	do.....	6.1	5.5	5.5	-10	0
Corn meal.....	do.....	5.1	5.1	5.2	+2	+2
Rolled oats.....	do.....	9.1	9.0	9.0	-1	0
Corn flakes.....	8-oz. pkg.....	10.9	10.1	10.0	-8	-1
Wheat cereal.....	28-oz. pkg.....	25.4	25.5	25.4	0	-0.4
Macaroni.....	Pound.....	20.3	20.0	20.0	-1	0
Rice.....	do.....	11.7	10.6	10.7	-9	+1
Beans, navy.....	do.....	9.2	9.0	9.3	+1	+3
Potatoes.....	do.....	5.0	4.5	6.0	+20	+33
Onions.....	do.....	7.4	8.7	8.8	+10	+1
Cabbage.....	do.....	6.1	8.7	9.6	+57	+10
Beans, baked.....	No. 2 can.....	11.9	11.6	11.5	-3	-1
Corn, canned.....	do.....	16.4	15.6	15.6	-5	0
Peas, canned.....	do.....	17.4	16.8	16.7	-4	-1
Tomatoes, canned.....	do.....	11.9	12.1	12.0	+1	-1
Sugar.....	Pound.....	6.9	7.3	7.3	+6	0
Tee.....	do.....	76.9	77.4	77.3	+1	-0.1
Coffee.....	do.....	51.0	48.2	47.9	-6	-1
Prunes.....	do.....	17.1	15.4	15.6	-9	+1
Raisins.....	do.....	14.7	14.3	14.3	-3	0
Bananas.....	Dozen.....	35.9	33.9	33.6	-6	-1
Oranges.....	do.....	50.3	49.8	49.3	-2	-1
Weighted food index.....					-0.8	+2.0

<sup>1</sup> In addition to retail prices of food and coal, the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

Table 1 shows for the United States retail prices of food on June 15, 1926, and May 15 and June 15, 1927, as well as the percentage changes in the year and in the month. For example, the retail price per pound of navy beans was 9.2 cents on June 15, 1926; 9.0 cents on May 15, 1927; and 9.3 cents on June 15, 1927. These figures show increases of 1 per cent in the year and 3 per cent in the month.

The cost of the various articles of food combined shows a decrease of 0.8 per cent on June 15, 1927, as compared with June 15, 1926, and an increase of 2 per cent on June 15, 1927, as compared with May 15, 1927.

Table 2 shows for the United States average retail prices of specified food articles on June 15, 1913, and on June 15 of each year from 1921 to 1927, together with percentage changes in June of each of these specified years, compared with June, 1913. For example, the retail price per pound of potatoes was 1.8 cents in June, 1913; 2.7 cents in June, 1921; 3.5 cents in June, 1922; 3.2 cents in June, 1923; 3.3 cents in June, 1924; 3.5 cents in June, 1925; 5.0 cents in June, 1926; and 6.0 cents in June, 1927.

As compared with June, 1913, these figures show increases of 50 per cent in June, 1921; 94 per cent in June, 1922; 78 per cent in June, 1923; 83 per cent in June, 1924; 94 per cent in June, 1925; 178 per cent in June, 1926; and 233 per cent in June, 1927.

The cost of the various articles of food combined showed an increase of 62.1 per cent in June, 1927, as compared with June, 1913.

## RETAIL PRICES OF FOOD

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TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JUNE 15, 1927, OF CERTAIN SPECIFIED YEARS COMPARED WITH JUNE 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on June 15—							Per cent of increase June 15 of each specified year compared with June 15, 1913								
		1913	1921	1922	1923	1924	1925	1926	1927	1921	1922	1923	1924	1925	1926	1927	
Sirloin steak.....	Pound.....	Clts.	Clts.	Clts.	Clts.	Clts.	Clts.	Clts.	Clts.	54	48	55	57	58	62	64	
Round steak.....	do.....	25.9	40.0	38.4	40.1	40.7	41.0	42.0	42.4	58	48	53	54	56	60	64	
Rib roast.....	do.....	22.6	35.6	33.5	34.5	33.8	35.2	36.2	37.0	58	48	53	54	56	60	64	
Chuck roast.....	do.....	20.1	29.8	28.2	28.8	29.4	29.8	30.8	31.1	48	40	43	46	48	52	55	
Plate beef.....	do.....	16.3	21.6	20.1	20.4	21.2	21.8	22.7	23.5	33	23	25	30	34	39	44	
Pork chops.....	do.....	12.2	14.1	11.2	12.6	13.2	13.8	14.6	15.2	16	6	3	8	13	20	25	
Bacon.....	do.....	20.8	34.1	33.9	29.9	30.2	36.2	42.0	34.7	64	63	44	45	74	102	67	
Ham.....	do.....	27.3	42.9	40.4	39.0	36.7	42.7	50.1	54.7	57	48	43	33	72	89	73	
Lamb, leg of.....	do.....	19.4	35.0	38.0	38.1	38.7	38.4	41.4	41.0	80	96	96	99	98	116	111	
Hens.....	do.....	21.9	38.6	36.9	35.4	35.9	36.9	40.2	36.3	76	68	62	64	68	84	66	
Salmon, canned, red.....	do.....	37.5	52.2	31.1	31.2	31.3	38.1	32.3	—	—	—	—	—	—	—	—	
Milk, fresh.....	Quart.....	8.8	14.2	12.5	13.5	13.5	13.7	13.9	13.9	61	42	53	53	56	57	58	
Milk, evaporated.....	(1).....	13.8	10.9	12.2	11.6	11.3	11.5	11.5	11.5	—	—	—	—	—	—	—	
Butter.....	Pound.....	35.2	40.2	44.9	50.0	48.6	52.7	50.0	35.1	14	28	42	38	50	43	47	
Oleomargarine (all butter substitutes).....	do.....	28.2	27.1	28.3	29.1	30.3	30.3	1.2	8.2	—	—	—	—	—	—	—	
Cheese.....	do.....	21.8	29.5	31.1	36.1	34.4	36.5	35.7	37.0	35	43	66	58	67	64	70	
Lard.....	do.....	15.8	16.2	17.2	17.2	16.9	22.9	22.6	18.8	3	9	9	7	45	43	19	
Vegetable lard substitute.....	do.....	21.2	22.4	22.7	24.9	25.8	25.8	25.8	25.1	—	—	—	—	—	—	—	
Eggs, strictly fresh.....	Dozen.....	27.9	35.0	34.1	35.4	36.1	42.3	40.7	33.5	25	22	27	29	52	46	20	
Bread.....	Pound.....	5.6	9.8	8.8	8.7	8.7	9.4	9.4	9.3	75	57	55	55	68	68	66	
Flour.....	do.....	3.3	5.9	5.3	4.8	4.6	6.1	6.1	5.5	79	61	45	39	85	85	67	
Corn meal.....	do.....	2.9	4.5	3.9	4.0	4.4	5.4	5.1	5.2	55	34	38	52	86	76	79	
Rolled oats.....	do.....	9.9	8.7	8.8	8.8	9.2	9.1	9.0	—	—	—	—	—	—	—	—	
Corn flakes.....	(2).....	12.3	9.9	9.7	9.7	11.0	10.9	10.0	—	—	—	—	—	—	—	—	
Wheat cereal.....	(3).....	29.8	25.8	24.4	24.3	24.6	25.4	25.4	—	—	—	—	—	—	—	—	
Macaroni.....	Pound.....	20.7	20.0	19.7	10.5	20.5	20.3	20.0	—	—	—	—	—	—	—	—	
Rice.....	do.....	8.6	8.8	9.6	9.4	9.9	11.0	11.1	11.7	10.7	2	12	9	15	28	36	24
Beans, navy.....	do.....	7.9	10.6	11.4	9.7	10.3	9.2	9.3	—	—	—	—	—	—	—	—	
Potatoes.....	do.....	1.8	2.7	3.5	3.2	3.3	3.5	5.0	6.0	50	94	78	83	94	178	233	
Onions.....	do.....	5.7	8.0	8.1	6.8	9.9	7.4	8.8	—	—	—	—	—	—	—	—	
Cabbage.....	do.....	6.0	5.1	6.2	5.8	6.0	6.1	9.6	—	—	—	—	—	—	—	—	
Beans, baked.....	(1).....	14.4	13.2	13.0	12.7	12.4	11.9	11.5	—	—	—	—	—	—	—	—	
Corn, canned.....	(1).....	15.9	15.5	15.4	15.8	18.2	16.4	15.6	—	—	—	—	—	—	—	—	
Peas, canned.....	(1).....	17.6	17.8	17.5	18.1	18.4	17.4	16.7	—	—	—	—	—	—	—	—	
Tomatoes, canned.....	(4).....	11.3	13.9	13.0	13.0	13.8	11.9	12.0	—	—	—	—	—	—	—	—	
Sugar, granulated.....	Pound.....	5.3	7.8	7.1	11.1	8.3	7.2	6.9	7.3	47	34	109	57	36	30	38	
Tea.....	do.....	54.4	68.3	68.0	69.5	70.9	75.8	76.9	77.3	26	25	28	30	39	41	42	
Coffee.....	do.....	29.8	35.7	36.1	37.8	42.3	50.8	51.0	47.9	20	21	27	42	70	71	61	
Prunes.....	do.....	18.5	20.6	19.3	17.4	17.3	17.1	15.6	—	—	—	—	—	—	—	—	
Raisins.....	do.....	30.9	24.1	17.6	15.4	14.5	14.7	14.3	—	—	—	—	—	—	—	—	
Bananas.....	Dozen.....	41.6	36.3	38.1	35.8	36.5	35.9	33.6	—	—	—	—	—	—	—	—	
Oranges.....	do.....	49.9	63.5	53.9	45.1	60.9	50.3	49.3	—	—	—	—	—	—	—	—	
Weighted food index <sup>a</sup>									47.7	44.0	47.6	45.7	58.6	63.3	62.1		

<sup>a</sup> 15-16 ounce can.

<sup>b</sup> 8-ounce package.

<sup>c</sup> 28-ounce package.

<sup>d</sup> No. 2 can.

<sup>e</sup> Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for \$1 in specified years, 1913 to 1926, and in May and June, 1927.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1 IN EACH YEAR, 1913 TO 1926, AND IN MAY AND JUNE, 1927

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for \$1										
1913	Cents per lb.	Lbs.										
1913	25.4	3.9	22.3	4.5	19.8	5.1	16.0	6.3	12.1	8.3	21.0	4.8
1920	43.7	2.3	39.5	2.5	33.2	3.0	26.2	3.8	18.3	5.5	42.3	2.4
1921	38.8	2.6	34.4	2.9	29.1	3.4	21.2	4.7	14.3	7.0	34.9	2.9
1922	37.4	2.7	32.3	3.1	27.6	3.6	19.7	5.1	12.8	7.8	33.0	3.0
1923	39.1	2.6	33.5	3.0	28.4	3.5	20.2	5.0	12.9	7.8	30.4	3.3
1924	39.6	2.5	33.8	3.0	28.8	3.5	20.8	4.8	13.2	7.6	30.8	3.2
1925	40.6	2.5	34.7	2.9	29.6	3.4	21.6	4.6	13.8	7.2	36.6	2.7
1926	41.3	2.4	35.6	2.8	30.3	3.3	22.5	4.4	14.6	6.8	39.5	2.5
1927:												
May	42.3	2.4	36.9	2.7	31.2	3.2	23.5	4.3	15.2	6.6	36.4	2.7
June	42.4	2.4	37.0	2.7	31.1	3.2	23.5	4.3	15.2	6.6	34.7	2.9
	Bacon		Ham		Hens		Milk		Butter		Cheese	
1913	Cents per lb.	Lbs.	Cents per lb.	Lbs.	Cents per lb.	Lbs.	Cents per qt.	Qts.	Cents per lb.	Lbs.	Cents per lb.	Lbs.
1913	27.0	3.7	26.9	3.7	21.3	4.7	8.9	11.2	38.3	2.6	22.1	4.5
1920	52.3	1.9	55.5	1.8	44.7	2.2	16.7	6.0	70.1	1.4	41.6	2.4
1921	42.7	2.3	48.8	2.0	39.7	2.5	14.6	6.8	51.7	1.9	34.0	2.9
1922	39.8	2.5	48.8	2.0	36.0	2.8	13.1	7.6	47.9	2.1	32.9	3.0
1923	39.1	2.6	45.5	2.2	35.0	2.9	13.8	7.2	55.4	1.8	36.9	2.7
1924	37.7	2.7	45.3	2.2	35.3	2.8	13.8	7.2	51.7	1.9	35.3	2.8
1925	46.7	2.1	52.6	1.9	36.6	2.7	14.0	7.1	54.8	1.8	36.7	2.7
1926	50.3	2.0	57.4	1.7	38.8	2.6	14.0	7.1	53.1	1.9	36.6	2.7
1927:												
May	47.6	2.1	56.3	1.8	38.4	2.6	13.9	7.2	53.4	1.9	37.0	2.7
June	47.1	2.1	55.5	1.8	36.3	2.8	13.9	7.2	51.8	1.9	37.0	2.7
	Lard		Eggs		Bread		Flour		Corn meal		Rice	
1913	Cents per lb.	Lbs.	Cents per doz.	Dozs.	Cents per lb.	Lbs.						
1913	15.8	6.3	34.5	2.9	5.6	17.9	3.3	30.3	3.0	33.3	8.7	11.5
1920	20.5	3.4	68.1	1.5	11.5	8.7	8.1	12.3	6.5	15.4	17.4	5.7
1921	18.0	5.6	50.9	2.0	9.9	10.1	5.8	17.2	4.5	22.2	9.5	10.5
1922	17.0	5.9	44.4	2.3	8.7	11.5	5.1	19.6	3.9	25.6	9.5	10.5
1923	17.7	5.6	46.5	2.2	8.7	11.5	4.7	21.3	4.1	24.4	9.5	10.5
1924	19.0	5.3	47.8	2.1	8.8	11.4	4.9	20.4	4.7	21.3	10.1	9.9
1925	23.3	4.3	52.1	1.9	9.4	10.6	6.1	16.4	5.4	18.5	11.1	9.0
1926	21.9	4.6	48.5	2.1	9.4	10.6	6.0	16.7	5.1	19.6	11.6	8.6
1927:												
May	19.0	5.3	33.6	3.0	9.4	10.6	5.5	18.2	5.1	19.6	10.6	9.4
June	18.8	5.3	33.5	3.0	9.3	10.8	5.5	18.2	5.2	19.2	10.7	9.3
	Potatoes		Sugar		Tea		Coffee					
1913	Cents per lb.	Lbs.										
1913	1.7	58.8	5.5	18.2	54.4	1.8	29.8	3.4				
1920	6.3	15.9	19.4	5.2	73.3	1.4	47.0	2.1				
1921	3.1	32.3	8.0	12.5	69.7	1.4	36.3	2.8				
1922	2.8	35.7	7.3	13.7	68.1	1.5	36.1	2.8				
1923	2.9	34.5	10.1	9.9	69.5	1.4	37.7	2.7				
1924	2.7	37.0	9.2	10.9	71.5	1.4	43.3	2.3				
1925	3.6	27.8	7.2	13.9	75.5	1.3	51.5	1.9				
1926	4.9	20.4	6.9	14.5	76.7	1.3	51.0	2.0				
1927:												
May	4.5	22.2	7.3	13.7	77.4	1.3	48.2	2.1				
June	6.0	16.7	7.3	13.7	77.3	1.3	47.9	2.1				

## **Index Numbers of Retail Prices of Food in the United States**

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, from 1913 to 1926,<sup>2</sup> and by months for 1926, and for January through June, 1927. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1926 was 162.6, which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly 3 points, but an increase of 1.75 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100.0 are 155.4 for May and 158.5 for June, 1927.

The curve shown in the chart on page 163 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

<sup>3</sup> For index numbers of each month, January, 1913, to December, 1925, see Bulletin No. 396, pp. 44 to 61, and Bulletin No. 418, pp. 38 to 51.

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913 AND 1920 TO 1926, AND BY MONTHS FOR 1926, AND JANUARY THROUGH JUNE, 1927

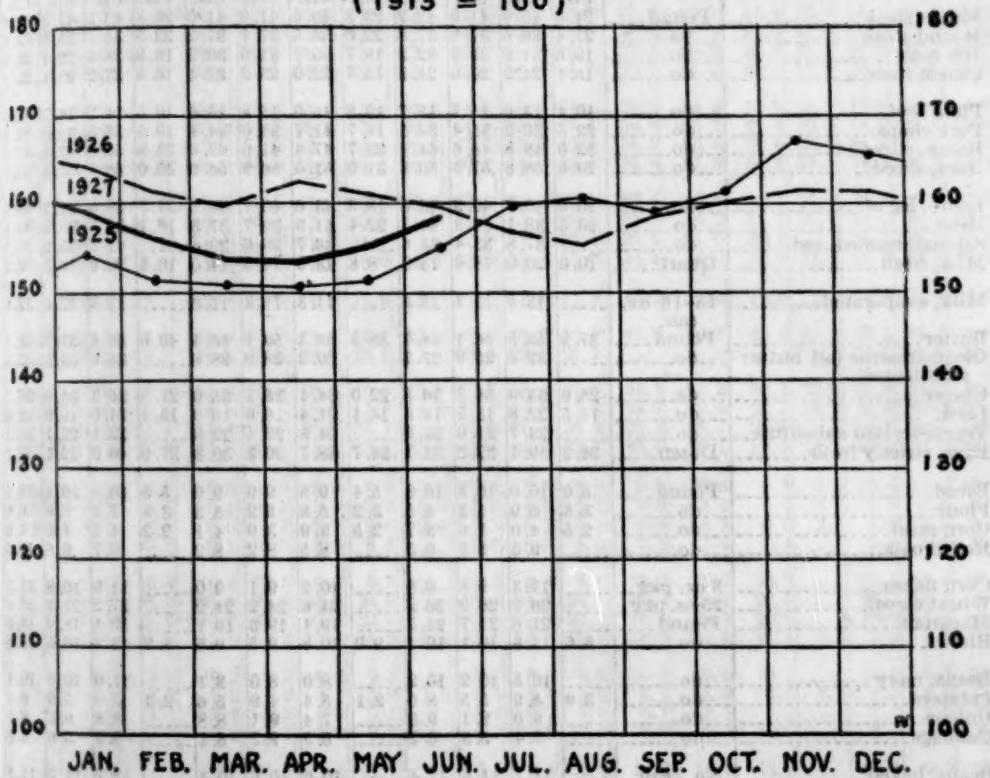
[Average for year 1913 = 100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926	162.6	158.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1926: January	160.6	157.0	151.5	138.1	119.8	173.8	178.5	198.1	181.2	159.6	144.6	170.1
February	159.8	156.1	148.0	138.1	120.7	172.9	181.1	199.3	182.6	159.6	142.3	169.7
March	160.2	156.5	151.0	138.1	120.7	177.1	179.3	200.7	185.0	157.3	139.9	168.3
April	161.8	157.8	152.5	139.4	121.5	182.4	179.6	202.6	190.1	156.2	132.9	165.2
May	163.4	160.5	153.5	140.6	120.7	191.9	182.6	207.8	192.5	156.2	130.5	162.9
June	165.4	162.3	154.5	141.9	120.7	200.0	190.7	221.9	188.7	155.1	131.3	161.5
July	165.4	162.8	155.1	141.9	119.8	198.6	193.7	226.4	184.0	155.1	130.8	161.1
August	164.6	162.3	153.5	140.6	118.2	192.9	192.6	225.7	177.9	156.2	132.1	161.5
September	165.0	163.2	154.5	141.9	119.8	202.4	192.2	224.5	177.5	157.3	137.1	163.3
October	163.4	161.4	154.5	142.5	120.7	202.9	191.5	222.3	176.5	157.3	141.8	166.1
November	161.0	159.2	152.5	141.9	121.5	187.1	188.9	217.1	174.2	158.4	145.4	167.0
December	160.2	158.3	152.5	141.9	123.1	177.1	183.7	212.3	174.6	159.6	154.8	169.2
1927: January	160.6	158.3	153.0	141.9	124.0	174.3	181.1	211.2	180.8	158.4	152.5	170.1
February	161.0	158.7	153.5	141.9	123.1	171.0	179.6	210.8	180.8	158.4	153.5	170.1
March	161.8	159.6	155.3	142.5	123.1	174.3	179.3	210.0	181.7	158.4	154.6	168.8
April	164.6	163.2	156.1	145.6	125.6	175.7	178.2	210.8	182.6	157.3	152.5	167.9
May	166.5	165.5	157.6	146.9	125.6	173.3	176.3	209.3	180.3	156.2	139.4	167.4
June	166.9	165.9	157.1	146.9	125.6	165.2	174.4	206.3	170.4	156.2	135.2	167.4
Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles <sup>1</sup>	
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	180.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4	
1921	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3	
1922	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6	
1923	112.0	134.8	155.4	142.1	136.7	109.2	170.6	183.6	127.8	126.5	146.2	
1924	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9	
1925	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4	
1926	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6	
1926: January	141.1	156.2	167.9	187.9	173.3	133.3	341.2	121.8	139.9	172.1	164.3	
February	140.5	127.0	167.9	190.9	173.3	133.3	335.3	121.8	139.9	172.1	161.5	
March	138.6	111.6	167.9	187.9	173.3	134.5	329.4	121.8	139.9	172.1	159.9	
April	136.1	111.9	167.9	184.8	170.0	134.5	394.1	120.0	140.3	171.5	162.4	
May	136.1	112.8	167.9	184.8	170.0	134.5	352.9	121.8	140.4	171.1	161.1	
June	143.0	118.0	167.9	184.8	170.0	134.5	294.1	125.5	141.4	171.1	159.7	
July	144.9	122.0	167.9	181.8	170.0	134.5	241.2	125.5	141.5	171.5	157.0	
August	143.7	130.1	167.9	181.8	170.0	133.3	211.8	127.3	141.7	171.1	155.7	
September	141.1	149.3	167.9	175.8	170.0	134.5	229.4	127.3	141.5	171.1	158.5	
October	138.6	168.7	167.9	172.7	170.0	133.3	223.5	129.1	142.1	170.8	160.0	
November	133.5	191.3	167.9	172.7	170.0	129.9	235.3	129.1	141.7	170.5	161.6	
December	129.1	189.0	167.9	169.7	170.0	128.7	235.3	132.7	141.4	170.1	161.8	
1927: January	126.6	162.0	167.9	169.7	170.0	126.4	235.3	136.4	142.5	168.5	150.3	
February	124.1	128.1	167.9	169.7	170.0	124.1	223.5	136.4	142.3	167.4	156.0	
March	122.8	102.6	167.9	166.7	170.0	124.1	217.6	134.5	142.6	165.4	153.8	
April	120.9	98.3	167.9	166.7	170.0	123.0	217.6	132.7	142.6	163.8	153.6	
May	120.3	97.4	167.9	166.7	170.0	121.8	264.7	132.7	142.3	161.7	155.4	
June	119.0	97.1	166.1	166.7	173.3	123.0	352.9	132.7	142.1	160.7	158.5	

<sup>1</sup> 30 articles in 1907; 15 articles in 1908-1912; 22 articles in 1913-1920; 43 articles in 1921-1927.

## TREND OF RETAIL PRICES OF FOOD.

(1913 = 100)



## Retail Prices of Food in 51

AVERAGE retail food prices are shown in Table 5 for 40 cities. For 11 other cities prices are shown for the same dates with the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL  
[Exact comparisons of prices in different cities can not be made for some articles]

Article	Unit	Atlanta, Ga.			Baltimore, Md.*			Birmingham, Ala.				
		June 15—		June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	
		1913	1926		1913	1926			1913	1926		
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
Round steak	do	24.0	40.9	41.9	42.2	23.3	40.5	41.0	41.0	26.8	40.5	41.3
Rib roast	do	21.4	36.5	37.8	37.8	22.0	36.5	37.1	37.2	22.5	35.1	35.6
Chuck roast	do	19.6	31.9	32.3	32.2	18.7	30.3	31.0	30.9	19.9	28.5	29.1
Plate beef	do	15.4	24.2	24.6	24.6	15.7	22.0	23.2	23.1	16.8	23.2	23.1
Pork chops	do	10.4	13.6	15.2	15.2	12.8	15.0	15.8	15.6	10.5	14.2	14.7
Bacon, sliced	do	22.5	39.2	35.4	34.5	18.7	41.7	35.9	34.1	19.5	38.8	35.0
Ham, sliced	do	32.0	48.8	45.6	44.3	23.7	47.4	41.9	42.1	33.8	50.8	47.1
Lamb, leg of	do	29.0	58.8	57.5	56.8	31.0	61.0	56.9	56.9	30.0	58.4	55.3
Hens	do	20.0	40.7	40.3	40.6	18.5	43.0	40.7	41.5	21.7	39.0	41.3
Salmon, canned, red	do	37.8	33.4	33.6	34.1	22.4	41.9	39.7	37.3	18.7	37.3	35.3
Milk, fresh	Quart	10.0	20.0	18.0	18.0	8.8	13.0	14.0	14.0	10.3	20.0	16.3
Milk, evaporated	15-16 oz. can.	13.5	13.3	13.5	—	11.3	11.3	11.3	—	12.5	12.6	12.6
Butter	Pound	37.9	55.5	56.4	54.7	38.3	55.3	59.4	56.4	40.0	56.6	57.7
Oleomargarine (all butter substitutes)	do	32.6	26.9	27.7	—	30.3	28.9	28.8	—	35.9	33.3	32.2
Cheese	do	25.0	33.9	36.3	36.3	22.0	34.1	35.1	35.0	21.8	35.3	35.9
Lard	do	15.5	22.8	18.2	18.3	14.1	21.4	16.6	16.9	15.4	24.0	19.9
Vegetable lard substitute	do	23.7	21.0	21.8	—	24.3	22.4	22.3	—	22.1	22.1	22.1
Eggs, strictly fresh	Dozen	24.2	39.1	32.2	33.1	24.7	38.7	30.3	30.3	27.0	40.0	32.1
Bread	Pound	6.0	10.9	10.8	10.8	5.4	9.8	9.9	9.9	5.3	10.2	10.4
Flour	do	3.8	6.9	6.3	6.5	3.2	5.8	5.2	5.3	3.8	7.2	6.6
Corn meal	do	2.5	4.0	3.6	3.7	2.5	3.9	3.9	4.1	2.2	4.1	4.0
Rolled oats	do	9.5	9.3	9.5	—	8.5	8.2	8.2	—	9.7	9.8	10.0
Corn flakes	8-oz. pkg.	11.3	9.8	9.8	—	10.2	9.1	9.0	—	11.9	10.8	11.1
Wheat cereal	25-oz. pkg.	26.2	26.2	26.2	—	24.6	24.2	24.2	—	27.2	27.4	27.6
Macaroni	Pound	21.6	21.7	21.7	—	19.1	19.3	19.1	—	19.1	18.9	18.9
Rice	do	8.6	11.3	10.1	10.5	9.0	10.8	9.5	9.5	8.2	12.2	10.5
Beans, navy	do	10.5	10.2	10.2	—	8.0	8.0	8.1	—	11.0	10.0	10.1
Potatoes	do	2.9	5.9	5.5	8.6	2.1	5.4	4.9	5.6	2.3	5.9	5.9
Onions	do	8.0	9.1	9.3	—	7.4	9.1	8.8	—	8.8	9.1	8.9
Cabbage	do	5.4	5.3	6.2	—	6.5	9.2	8.1	—	5.9	5.6	5.8
Beans, baked	No. 2 can	11.7	11.4	11.4	—	10.6	10.6	10.4	—	12.7	11.7	11.7
Corn, canned	do	17.7	18.2	18.2	—	15.4	14.4	14.2	—	18.4	16.8	16.4
Peas, canned	do	19.2	19.7	19.3	—	15.4	14.7	14.5	—	21.4	20.8	20.8
Tomatoes, canned	do	11.2	11.6	11.5	—	9.9	10.8	10.7	—	10.8	10.9	10.9
Sugar, granulated	Pound	5.4	7.3	7.6	7.7	4.5	6.3	6.5	6.5	5.2	7.4	7.9
Tea	do	60.0	106.6	105.6	104.1	56.0	75.0	73.0	73.0	61.3	96.2	96.2
Coffee	do	32.0	51.1	49.8	49.2	25.2	47.8	43.5	43.3	28.8	54.2	52.7
Prunes	do	18.7	17.2	17.2	—	14.5	13.2	13.1	—	19.6	18.1	17.9
Raisins	do	17.5	16.2	16.3	—	13.4	12.9	13.0	—	15.2	14.7	14.7
Bananas	Dozen	28.5	20.5	20.5	—	25.8	25.0	25.0	—	37.5	37.5	37.9
Oranges	do	48.7	43.6	45.9	—	49.3	50.0	49.9	—	53.0	46.1	46.9

<sup>1</sup> The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

## CITIES ON SPECIFIED DATES

for June 15, 1913 and 1926, and for May 15 and June 15, 1927.  
the exception of April, 1913, as these cities were not scheduled by

## ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

particularly meats and vegetables, owing to differences in trade practices]

Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.				Butte, Mont.				Charleston, S. C.			
June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1926	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
41.3	41.6	137.0	165.7	167.3	168.4	49.8	49.4	49.0	22.8	41.1	41.3	42.5	32.5	34.3	34.4	22.3	34.5	34.0	33.3
35.6	35.6	34.0	51.5	53.8	54.3	41.7	42.8	42.8	19.8	34.8	35.5	36.0	28.8	31.1	31.3	21.0	31.5	31.3	31.3
29.1	29.9	25.0	39.5	39.4	39.3	36.7	37.7	37.4	17.5	30.3	31.0	32.1	28.1	29.3	29.0	21.3	27.0	27.7	26.7
23.1	24.4	18.0	27.4	29.8	29.4	27.1	28.1	28.1	15.5	23.3	24.3	24.2	20.1	21.3	20.8	15.0	20.5	21.5	21.0
14.7	15.0	14.0	18.2	19.3	19.5	11.6	11.6	11.5	11.8	14.0	14.3	14.1	12.9	14.2	14.3	11.9	15.2	14.6	14.6
35.0	32.9	24.0	45.0	38.7	36.2	44.7	38.1	37.1	20.3	44.9	39.0	37.1	39.0	35.1	35.1	22.5	38.9	35.5	35.9
47.1	47.3	25.4	49.4	46.9	45.6	53.6	52.4	52.4	23.3	47.7	43.7	43.4	58.8	55.4	54.6	25.8	45.8	41.3	41.0
55.3	54.7	81.8	66.0	60.8	60.3	66.9	59.6	59.3	26.3	60.2	54.1	53.6	64.6	61.3	60.4	28.3	54.1	51.8	51.1
41.3	40.4	23.0	46.6	42.8	42.8	46.5	43.8	42.8	18.7	39.6	37.3	37.1	39.4	41.6	40.5	21.3	42.5	42.5	41.3
35.3	33.4	26.2	44.4	41.6	40.0	44.3	42.3	39.5	21.7	41.7	40.2	38.1	37.6	39.2	35.7	21.4	44.0	38.3	37.6
33.2	33.5	38.6	32.0	31.6	35.4	31.9	31.5	-----	37.9	31.1	30.9	31.9	31.0	30.9	30.9	-----	39.1	28.7	29.0
16.3	16.3	8.9	13.9	14.4	14.4	15.0	16.0	16.0	8.0	13.0	13.0	13.0	14.0	14.0	11.7	18.0	19.0	19.0	
12.6	12.6	12.3	12.1	12.2	11.6	11.5	11.5	-----	11.3	11.3	11.3	11.2	11.3	11.3	11.5	-----	12.0	11.8	11.8
7.7	56.1	35.3	51.3	57.4	54.9	50.9	55.8	52.7	32.9	49.8	53.8	52.0	47.3	49.1	48.6	35.2	49.3	52.4	50.6
3.3	32.2	29.2	29.3	28.2	29.3	28.9	28.4	-----	28.5	29.1	28.7	-----	-----	-----	31.7	31.9	30.6	-----	
5.9	36.5	21.4	37.1	37.8	38.0	39.3	40.6	40.1	19.0	36.7	38.4	30.0	36.5	36.5	36.7	20.0	31.6	34.2	33.6
9.9	19.6	16.0	22.9	19.4	18.9	22.6	18.2	17.6	14.2	21.4	17.8	17.6	24.7	23.4	23.7	15.0	24.0	20.0	20.0
2.1	22.1	25.4	24.4	24.4	25.8	25.3	25.1	-----	26.2	26.3	25.9	29.3	29.7	29.7	24.3	22.3	22.9	22.9	
2.1	32.5	34.4	54.7	47.4	47.7	50.1	44.9	45.1	25.8	41.4	34.0	33.3	44.0	39.1	39.9	25.3	43.6	32.5	32.1
0.4	10.4	5.9	9.1	8.6	8.5	8.8	8.9	8.9	5.5	9.0	8.7	8.5	9.8	9.8	9.8	5.9	10.4	11.0	10.9
6.6	6.6	3.7	6.5	6.1	6.1	5.6	5.7	5.7	3.0	5.6	4.9	5.1	5.9	5.3	5.4	3.7	7.3	6.8	6.9
0.0	4.0	3.6	6.1	6.5	6.6	7.7	7.7	7.6	2.6	5.5	5.1	5.1	5.9	5.9	6.0	2.4	4.0	3.8	3.9
8.8	10.0	9.3	9.2	9.1	9.1	8.5	8.6	8.5	-----	8.6	8.6	8.6	7.3	7.4	7.5	-----	9.4	9.6	9.5
8.11.1	-----	11.0	10.4	10.1	10.5	9.8	9.7	-----	10.5	9.6	9.6	12.3	10.9	10.9	11.8	10.4	10.2	-----	
4.27.6	-----	24.8	25.0	25.1	24.6	24.8	24.8	-----	24.0	24.5	24.7	28.4	28.7	28.3	-----	26.7	26.3	26.0	-----
9.18.9	-----	22.8	22.6	22.7	22.7	22.7	22.7	-----	21.5	21.3	21.2	19.1	20.1	20.1	-----	18.9	18.6	18.6	-----
5.10.5	-----	9.2	12.9	11.7	11.9	11.2	11.4	11.5	9.3	11.5	10.3	10.1	12.2	11.1	11.1	5.5	9.5	7.4	7.4
0.10.1	-----	9.0	9.0	10.2	9.9	9.2	9.5	-----	8.7	8.5	8.5	10.6	10.1	10.1	10.1	-----	10.0	9.8	10.0
9.6.3	-----	1.7	4.5	4.2	5.3	4.9	4.1	5.9	1.8	5.4	4.3	5.6	3.8	3.2	4.6	2.4	4.3	3.9	4.4
1.8.9	-----	7.9	9.1	8.9	8.2	9.0	9.5	-----	8.3	9.7	9.4	6.7	8.3	9.2	-----	7.3	7.8	7.4	7.4
6.5.8	-----	7.5	11.2	10.2	7.5	9.9	9.6	-----	6.7	10.7	10.4	7.0	9.4	12.0	-----	3.7	4.2	5.6	5.6
7.11.7	-----	13.3	13.3	13.5	11.3	11.4	11.6	-----	10.1	9.8	9.9	14.7	13.9	13.9	-----	10.0	9.7	9.7	-----
8.16.4	-----	19.1	18.2	18.1	19.4	18.2	18.2	-----	15.6	15.5	15.6	15.7	14.8	14.8	-----	15.0	14.4	14.1	-----
8.20.8	-----	20.6	20.3	20.3	21.2	20.9	21.1	-----	16.9	15.9	16.0	14.3	15.3	13.9	-----	17.9	17.3	16.7	-----
9.10.9	-----	12.1	12.6	12.5	13.2	13.2	13.1	-----	13.7	13.2	13.4	13.3	13.3	12.9	-----	9.9	10.2	10.2	-----
9.7.9	-----	5.1	6.8	7.4	7.4	6.4	7.1	7.1	5.2	6.6	7.1	7.2	8.1	8.5	8.7	5.0	6.4	6.8	7.0
96.2	-----	58.6	75.9	75.6	75.1	59.8	60.9	60.9	45.0	72.4	68.3	67.2	83.8	82.2	81.9	50.0	76.7	76.9	76.9
52.2	-----	33.0	55.8	53.1	52.7	48.6	46.2	46.1	29.3	49.7	46.6	46.7	57.0	55.0	54.5	26.3	46.8	44.5	43.9
17.9	-----	16.5	15.3	15.3	16.2	15.6	15.8	-----	16.8	14.2	14.1	18.4	15.6	15.6	15.6	-----	15.5	14.1	14.3
14.7	-----	14.0	13.3	13.3	14.1	14.1	14.2	-----	14.1	13.6	13.4	15.8	15.1	15.1	15.1	-----	14.2	14.3	14.5
37.9	-----	44.4	45.6	44.4	36.4	34.4	34.0	-----	42.2	41.6	42.3	14.8	13.9	14.4	14.4	-----	39.3	25.6	27.5
46.9	-----	53.0	52.1	51.2	55.4	56.4	55.2	-----	52.1	54.4	55.2	45.8	45.7	48.0	48.0	-----	49.4	43.6	40.0

\* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927
		1913	1926			1913	1926			1913	1926		
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	23.4	43.8	45.0	44.5	23.9	38.8	37.7	38.6	25.2	39.6	41.3	42.2
Rib roast	do	20.3	35.5	35.9	36.0	21.3	34.6	34.4	35.2	22.0	33.9	35.3	36.4
Chuck roast	do	20.0	34.1	35.3	34.4	19.4	29.8	31.4	31.2	20.0	28.3	29.5	29.5
Plate beef	do	15.9	25.0	25.4	25.2	15.8	21.3	23.1	23.0	17.2	23.6	24.7	24.6
Pork chops	do	11.2	14.8	15.1	15.0	12.5	15.3	15.8	15.9	12.5	13.9	14.3	14.4
Bacon, sliced	do	18.8	39.5	34.3	31.5	19.6	40.6	34.1	30.2	20.7	44.3	35.9	34.0
Ham, sliced	do	32.0	54.8	51.6	50.3	26.4	46.2	41.4	41.3	28.6	52.7	47.3	46.7
Lamb, leg of	do	32.4	57.7	56.7	55.9	29.2	59.5	55.5	65.5	36.0	63.0	57.0	55.8
Hens	do	20.2	42.3	42.2	41.8	16.5	41.5	39.4	39.2	19.2	39.5	39.4	39.9
Salmon, canned, red	do	20.3	40.2	39.0	36.5	24.9	40.3	40.2	38.3	22.3	41.8	39.3	36.9
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	12.0	13.3	13.3	8.0	13.7	13.7	13.7
Milk, evaporated	15-16 oz.	11.0	11.2	11.2	—	10.8	11.2	11.2	—	—	11.2	11.3	11.4
Butter	Pound	32.7	48.0	51.8	50.3	35.1	49.2	52.7	50.9	36.2	52.1	55.6	53.5
Oleomargarine (all butter substitutes)	do	26.9	27.0	26.9	—	29.6	27.7	27.7	—	—	31.8	29.2	29.2
Cheese	do	25.0	40.8	42.1	42.1	21.0	35.1	36.4	36.3	23.0	36.3	38.5	39.0
Lard	do	15.0	21.7	18.8	18.8	14.2	21.6	17.0	16.7	16.5	23.4	20.5	20.6
Vegetable lard substitute	do	26.4	26.6	26.7	—	25.8	25.8	25.8	—	—	27.3	26.7	26.7
Eggs, strictly fresh	Dozen	24.3	42.4	36.3	35.0	21.3	35.5	27.8	28.3	27.6	40.6	35.1	33.7
Bread	Pound	6.1	9.8	9.9	9.9	4.8	9.2	8.9	9.0	5.5	7.9	7.7	7.7
Flour	do	2.8	5.6	5.2	5.3	3.3	6.3	5.7	5.8	3.2	6.2	5.5	5.6
Corn meal	do	2.9	6.0	6.8	6.7	2.7	4.1	3.9	4.0	2.7	5.1	5.4	5.3
Rolled oats	do	8.3	8.6	8.7	—	8.7	8.8	8.7	—	—	9.4	9.3	9.4
Corn flakes	8-oz. pkg	10.1	9.8	9.7	—	10.4	9.8	9.8	—	—	11.2	10.4	10.1
Wheat cereal	28-oz. pkg	24.6	25.4	25.2	—	24.9	24.8	24.8	—	—	25.5	25.3	25.3
Macaroni	Pound	19.1	19.3	19.2	—	18.1	18.5	18.5	—	—	21.9	21.5	22.0
Rice	do	8.7	11.9	11.7	11.1	8.8	11.2	10.0	10.3	8.5	12.0	11.4	11.3
Beans, navy	do	9.2	9.5	9.6	—	7.7	7.5	7.8	—	—	7.8	8.4	8.5
Potatoes	do	1.2	5.4	4.3	6.4	2.3	5.4	4.6	6.9	1.5	6.1	5.1	6.5
Onions	do	7.1	8.8	9.0	—	6.8	8.3	9.0	—	—	7.8	9.6	9.4
Cabbage	do	6.4	10.1	11.4	—	6.5	9.2	10.9	—	—	6.3	9.7	11.0
Beans, baked	No. 2 can	12.6	12.7	12.6	—	10.9	10.3	10.4	—	—	12.8	13.2	13.1
Corn, canned	do	16.7	16.3	16.1	—	15.5	14.9	14.7	—	—	17.1	16.2	16.8
Peas, canned	do	17.2	16.8	16.7	—	17.0	17.0	16.7	—	—	17.8	18.2	18.1
Tomatoes, canned	do	14.1	13.7	13.8	—	12.0	12.0	12.0	—	—	13.7	14.1	14.0
Sugar, granulated	Pound	4.9	6.6	7.0	7.1	5.0	6.9	7.3	7.5	5.0	7.1	7.7	7.6
Tea	do	53.3	72.3	72.8	73.3	60.0	78.0	76.0	75.5	50.0	82.5	81.8	79.7
Coffee	do	30.7	51.5	47.4	48.2	25.6	46.5	42.5	42.6	26.5	54.7	52.2	51.3
Prunes	do	18.8	17.8	17.5	—	17.8	16.0	16.0	—	—	17.1	15.6	15.2
Raisins	do	15.4	15.2	15.1	—	14.9	14.5	14.4	—	—	14.7	14.7	14.6
Bananas	Dozen	42.9	39.2	38.8	—	40.0	36.0	35.0	—	—	10.3	10.4	10.4
Oranges	do	51.6	52.7	47.6	—	51.3	47.0	45.7	—	—	50.6	52.9	54.9

<sup>1</sup> The steak for which prices are here quoted is called "rump" in this city but in most of the other cities included in this report it would be known as "porterhouse" steak.

## RETAIL PRICES OF FOOD

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## CITIES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.			Denver, Colo.			Detroit, Mich.			Fall River, Mass.		
May 15, 1927	June 15, 1927	June 15, 1927	June 15—		June 15, 1927	June 15—		June 15, 1927	June 15—		June 15, 1927	June 15—		June 15, 1927
			1913	1926		1913	1926		1913	1926		1913	1926	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
41.3	42.2	39.6	48.1	40.4	22.5	35.8	37.1	37.3	24.2	35.2	34.8	36.0	24.2	42.4
35.3	36.4	35.2	35.4	35.9	20.8	32.5	33.8	34.5	22.1	31.6	32.0	32.9	19.4	35.4
29.5	29.5	30.7	32.1	32.1	19.2	28.1	27.3	28.3	17.8	25.1	25.1	26.3	19.4	30.7
24.7	24.6	24.9	25.8	26.1	16.3	21.4	22.1	23.3	15.8	20.3	20.4	21.0	15.0	23.2
14.3	14.4	15.4	16.2	16.3	12.8	17.0	17.5	18.1	9.4	11.8	12.0	12.2	11.5	14.4
35.9	34.6	39.5	35.2	34.1	21.7	38.7	35.8	35.4	20.3	30.7	33.0	30.9	19.2	44.4
47.3	46.7	51.8	50.1	49.9	39.0	50.6	46.2	45.3	28.0	52.4	48.4	46.7	24.0	54.8
57.0	55.8	57.7	56.9	56.2	31.3	63.8	59.5	57.4	30.0	59.5	57.4	55.5	25.5	64.2
39.4	39.9	45.0	47.0	47.5	22.0	42.0	44.3	44.3	17.8	37.5	37.8	37.8	17.4	44.8
39.3	36.9	39.9	38.9	37.7	18.3	33.1	31.8	31.5	21.2	33.8	33.0	29.4	21.6	42.8
33.2	32.9	40.8	34.7	35.4	—	41.5	34.1	33.4	—	38.4	32.7	32.5	22.8	40.0
13.7	13.7	11.0	12.0	12.0	10.0	12.3	11.0	11.0	8.4	12.0	12.0	12.0	8.0	14.0
11.3	11.4	11.4	11.4	—	—	13.0	13.1	13.1	—	10.9	10.7	10.7	—	11.1
55.6	53.5	48.4	51.8	50.4	36.0	49.5	50.5	49.3	34.3	45.9	48.1	46.8	34.0	51.0
29.2	29.2	25.5	28.0	27.7	—	33.8	30.7	31.0	—	29.4	24.8	25.0	—	28.8
38.5	39.0	34.9	36.6	36.5	26.0	34.7	30.9	30.9	26.1	36.9	37.2	36.8	20.3	36.4
20.5	20.6	20.3	16.1	16.1	17.5	25.3	22.1	21.8	16.3	23.4	19.6	19.1	16.1	22.6
26.7	26.7	26.0	26.0	26.0	26.2	24.9	22.6	22.7	—	24.9	21.5	22.3	22.1	27.1
35.1	33.7	34.3	27.4	26.5	22.0	35.1	27.7	27.3	25.0	36.1	30.0	29.1	26.0	40.8
7.7	7.7	8.1	8.0	7.8	5.4	9.5	9.5	9.5	5.4	8.4	8.1	8.1	5.6	8.4
5.5	5.6	6.1	5.5	5.4	2.3	5.8	5.3	5.5	2.6	5.1	4.2	4.4	3.1	6.0
5.4	5.3	3.7	3.7	3.7	2.7	4.3	4.3	4.4	2.4	4.3	4.4	4.4	2.8	5.7
9.3	9.4	9.3	9.4	9.4	—	10.2	10.5	10.4	—	8.6	7.5	7.6	—	9.3
0.4	10.1	10.9	10.1	10.0	—	11.1	11.1	10.5	—	11.2	10.0	9.8	—	10.0
5.3	25.3	25.0	26.2	26.4	—	27.4	27.8	27.9	—	25.4	24.8	24.8	—	25.9
1.5	22.0	22.0	21.0	21.0	—	21.3	21.9	21.4	—	20.5	19.6	19.6	—	21.9
1.4	11.3	13.4	12.0	12.6	9.3	13.1	11.8	11.9	8.6	11.6	9.9	9.7	8.4	12.3
4.4	8.5	7.7	7.8	8.0	—	10.3	10.6	10.6	—	10.1	9.8	10.1	—	8.2
5.1	6.5	5.4	4.6	6.6	2.2	6.0	6.2	6.5	1.4	4.3	4.7	7.1	1.5	5.0
6.6	9.4	8.7	10.2	9.8	—	6.6	8.7	9.0	—	7.2	7.2	8.5	—	7.4
7.7	11.0	6.7	10.1	13.1	—	5.2	7.0	9.5	—	5.9	7.5	10.3	—	6.1
2	13.1	12.5	12.6	12.5	—	13.3	13.5	13.1	—	12.3	11.3	11.3	—	11.7
2	16.8	15.8	14.0	14.0	—	18.3	18.2	18.3	—	15.0	13.9	13.7	—	15.4
2	18.1	15.0	14.9	15.1	—	21.4	22.0	22.0	—	15.5	14.8	15.0	—	16.4
1	14.0	12.3	13.0	13.3	—	11.6	12.7	13.1	—	12.5	11.6	11.7	—	11.9
7	7.6	7.0	7.7	7.8	5.7	7.8	8.2	8.0	5.4	7.6	7.7	8.0	5.0	7.0
8	79.7	89.7	88.8	88.8	66.7	106.6	106.1	106.7	52.8	68.9	69.0	68.8	43.3	71.8
2	51.3	51.6	48.9	49.0	36.7	60.0	58.1	58.1	29.4	51.5	49.5	49.2	29.3	51.8
6	15.2	17.6	16.9	16.9	—	21.1	20.4	21.0	—	17.8	16.1	15.9	—	18.3
7	14.6	14.9	14.3	14.3	—	16.7	16.5	16.0	—	14.9	14.6	14.3	—	15.4
4	10.4	37.8	38.1	37.9	—	35.0	37.5	33.8	—	12.0	16.4	11.1	—	36.4
9	54.9	46.3	54.5	50.5	—	57.5	50.1	49.9	—	58.0	45.8	43.4	—	51.8

<sup>1</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Houston, Tex.			Indianapolis, Ind.			Jacksonville, Fla.			
		June 15—		June 15, 1926	May 15, 1927		June 15—		June 15, 1926	May 15, 1927	
		June 15, 1926	May 15, 1927		May 15, 1927	June 15, 1927	June 15, 1926	June 15, 1927			
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
Round steak	do	32.8	35.4	35.4	24.7	39.2	39.4	39.9	26.0	37.1	35.8
Rib roast	do	31.5	33.9	33.9	23.8	37.8	38.3	39.0	20.3	31.9	31.3
Chuck roast	do	26.7	27.1	27.5	17.8	29.6	29.7	30.1	23.3	28.1	27.1
Plate beef	do	20.2	21.6	21.4	16.4	24.8	24.8	25.3	14.0	20.0	19.8
Pork chops	do	17.9	18.0	18.2	12.5	15.2	15.7	16.1	10.3	12.5	12.5
Bacon, sliced	do	38.3	35.5	34.3	21.3	41.1	34.4	32.2	21.3	40.0	35.4
Ham, sliced	do	50.8	48.0	45.8	29.0	49.1	43.4	42.3	26.3	51.4	44.4
Lamb, leg of	do	53.3	53.9	53.2	31.2	61.9	56.3	54.9	28.3	59.4	52.7
Hens	do	35.0	34.3	34.3	21.7	44.2	42.0	42.5	19.3	40.0	38.8
Salmon, canned, red	do	35.2	32.7	32.9	20.8	40.0	37.5	36.2	22.0	41.3	35.8
Milk, fresh	Quart	37.1	30.4	30.3	36.1	33.3	33.5	33.5	38.9	33.4	32.0
Milk, evaporated	15-16 oz. can	15.8	15.6	15.6	8.0	12.0	12.0	12.0	12.5	22.0	20.3
Butter	Pound	48.7	47.2	47.3	34.7	49.2	52.9	51.1	39.2	51.6	55.2
Oleomargarine (all butter substitutes)	do	30.5	28.0	27.2	30.0	29.5	28.9	28.9	31.1	30.6	30.6
Cheese	do	30.4	33.0	31.9	20.5	35.5	37.8	37.2	22.5	32.8	34.2
Lard	do	23.3	18.9	18.9	15.2	20.7	16.9	16.4	15.5	24.1	21.5
Vegetable lard substitute	do	20.5	16.6	16.8	26.7	27.4	27.4	27.4	25.0	22.0	22.4
Eggs, strictly fresh	Dozen	34.7	26.6	27.9	22.5	35.7	27.9	26.6	30.0	41.8	34.4
Bread	Pound	9.0	8.5	8.5	5.1	8.0	8.1	8.1	6.5	11.0	11.1
Flour	do	6.0	5.1	5.2	3.2	5.9	5.5	5.5	3.8	6.9	6.5
Corn meal	do	4.1	3.9	4.2	2.4	4.2	4.1	4.2	3.0	4.1	4.0
Rolled oats	do	8.9	8.7	8.5	9.2	8.3	8.3	8.3	9.2	9.4	9.6
Corn flakes	8-oz. pkg	11.7	10.2	9.7	10.2	9.6	9.7	9.7	11.4	9.9	9.7
Wheat cereal	28-oz. pkg	25.8	25.0	25.4	24.6	24.8	24.8	24.8	24.9	24.6	24.4
Macaroni	Pound	18.3	18.1	18.4	19.0	19.2	19.7	19.7	19.7	19.6	19.4
Rice	do	10.2	8.6	8.8	9.2	11.8	10.6	10.8	6.6	11.3	9.1
Beans, navy	do	9.6	9.2	9.6	7.6	7.9	8.5	8.5	10.3	9.7	9.4
Potatoes	do	5.7	4.9	6.1	1.4	4.9	4.4	6.4	2.6	6.8	4.7
Onions	do	5.7	7.8	7.7	8.2	9.7	9.8	9.8	8.0	8.4	8.4
Cabbage	do	3.9	5.0	7.7	6.2	9.9	12.5	12.5	5.4	5.3	8.6
Beans, baked	No. 2 can	11.6	11.2	11.2	10.0	9.9	10.3	10.3	10.9	10.7	10.8
Corn, canned	do	15.6	13.7	13.7	15.0	13.9	13.9	13.9	20.2	17.2	18.3
Peas, canned	do	14.2	13.5	13.5	14.8	13.7	13.7	13.7	18.9	17.8	17.6
Tomatoes, canned	do	9.8	10.8	10.8	11.5	12.8	12.8	12.8	10.5	10.8	10.1
Sugar, granulated	Pound	6.9	7.1	7.2	5.6	7.2	7.6	7.6	5.9	7.1	7.8
Tea	do	80.8	83.8	84.8	60.0	85.7	87.5	87.9	60.0	97.5	98.6
Coffee	do	44.8	42.0	41.1	30.5	50.9	48.1	48.0	34.5	49.8	48.8
Prunes	do	16.0	14.6	15.8	19.3	17.1	17.3	17.3	16.8	15.5	16.0
Raisins	do	14.6	14.3	14.4	15.9	15.2	15.1	15.1	16.4	14.5	14.3
Bananas	Dozen	30.0	26.5	26.9	31.8	30.0	30.5	30.5	29.0	29.7	25.8
Oranges	do	42.1	44.4	41.8	50.3	46.5	46.9	46.9	51.7	31.5	34.4

<sup>1</sup> The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

## RETAIL PRICES OF FOOD

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## CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.			Little Rock, Ark.			Los Angeles, Calif.			Louisville, Ky.			Manchester, N. H.		
June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927
1913	1926		1913	1926		1913	1926		1913	1926		1913	1926	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
24.7	39.0	37.7	38.5	26.3	35.0	36.0	36.0	24.0	37.1	37.4	23.6	35.4	37.9	37.8
35.8	34.1	33.4	34.2	19.9	31.5	33.2	33.2	20.8	30.3	30.8	30.6	20.0	31.7	34.0
31.3	27.1	26.7	27.0	19.4	27.3	28.9	28.9	20.0	29.6	29.3	29.18.3	27.3	27.8	27.6
27.1	19.0	19.9	19.4	19.8	16.3	21.2	21.9	15.8	19.7	19.7	19.9	15.6	19.4	21.8
19.2														
11.7	13.3	13.4	13.6	13.5	16.1	16.7	17.0	12.1	13.9	14.1	13.9	12.8	16.1	16.7
12.5	40.7	32.4	31.8	21.3	38.3	33.6	31.4	25.4	48.5	41.9	42.1	19.6	38.6	32.3
33.1	26.8	52.7	45.5	44.3	37.0	52.5	47.9	47.5	33.8	62.0	54.7	55.3	29.1	51.5
44.1	27.8	61.3	53.9	53.3	31.3	56.8	55.5	54.6	35.8	72.0	69.2	68.6	29.4	55.5
53.2														
19.2	36.7	36.7	37.6	21.3	41.9	40.0	43.3	19.2	37.4	36.4	36.6	18.1	44.0	41.7
39.0	34.3	32.6	30.6	20.9	32.5	31.0	29.8	26.6	45.0	43.3	42.6	23.2	39.9	36.0
35.8	38.9	34.5	34.0	---	42.9	32.5	32.5	---	36.0	31.2	30.6	---	38.7	30.5
32.0	8.7	13.0	13.0	10.0	15.0	15.0	15.0	10.0	15.0	15.0	15.0	8.8	12.0	12.0
20.3														
11.8	11.7	11.7	11.7	---	12.3	11.9	12.1	---	10.0	10.2	10.3	---	11.5	11.9
11.9	34.8	49.0	51.0	49.5	37.9	48.8	53.2	50.3	34.5	50.4	50.3	50.3	35.4	50.2
52.6														
27.6	25.8	25.6	25.6	---	31.1	28.5	28.2	---	30.8	26.3	26.2	---	32.5	27.2
30.8	21.8	35.7	36.0	35.5	21.7	34.6	37.4	36.8	19.5	39.1	38.2	38.1	20.8	36.0
34.0	16.2	23.4	18.3	18.7	15.8	24.1	21.8	21.8	31.8	24.2	19.2	19.1	15.3	21.4
21.4	22.7	27.3	27.3	27.4	---	23.9	22.5	22.1	---	26.1	24.6	24.5	---	28.8
22.4	22.2	36.6	29.2	28.1	27.5	34.9	27.2	26.9	30.5	41.7	31.9	35.4	20.8	35.1
34.5														
6.1	10.0	9.7	9.7	6.0	9.5	9.3	9.2	6.0	8.6	8.5	8.5	5.7	9.4	9.3
10.9	3.0	5.9	4.7	5.0	3.6	6.9	6.1	6.1	3.6	5.6	5.6	5.3	3.7	6.5
6.5	2.5	5.1	4.8	5.0	2.4	4.1	3.8	3.8	3.2	5.3	5.2	5.3	2.4	3.8
4.2	9.3	9.1	9.1	---	10.8	10.1	10.3	---	9.8	10.0	10.0	---	8.4	8.6
9.6														
12.1	10.3	10.2	10.2	---	12.0	10.7	10.2	---	10.1	9.7	9.7	---	10.6	9.8
9.7	27.1	26.5	26.4	---	25.0	25.9	25.9	---	24.8	25.1	24.9	---	24.2	25.3
24.4	20.5	19.9	19.9	---	20.5	20.2	20.2	---	18.1	18.3	18.3	---	19.5	18.9
9.2	8.7	11.4	9.4	9.8	8.3	10.9	8.4	8.6	7.7	11.3	10.0	10.1	8.1	11.6
9.4	9.3	8.9	9.3	---	9.4	9.0	9.1	---	9.3	9.2	9.6	---	7.6	7.9
6.4	1.5	5.0	4.5	6.2	1.7	5.6	5.2	5.5	1.6	3.8	4.7	5.2	2.0	5.6
8.4	7.9	8.6	8.8	---	7.5	9.0	9.1	---	5.7	7.4	7.4	---	7.6	10.1
8.6	5.2	9.6	7.5	---	5.4	7.6	7.4	---	4.6	5.7	9.2	---	6.6	7.6
12.9	12.5	12.5	10.1	10.6	10.4	11.7	11.1	10.6	---	10.9	10.2	10.2	---	14.0
0.8	15.0	14.1	14.0	16.5	16.2	16.6	16.2	15.7	15.6	16.8	14.3	14.9	---	17.7
8.3	15.6	14.6	14.8	17.5	17.8	17.5	17.4	16.9	17.0	16.1	14.6	13.8	---	18.9
7.6	12.3	11.5	11.7	10.6	11.1	10.7	15.7	14.5	14.4	9.9	10.8	10.8	---	11.4
0.1	5.5	7.4	7.5	7.6	5.5	7.5	8.0	7.9	5.3	6.6	7.0	7.0	5.1	7.1
7.8	54.0	83.5	89.4	89.7	50.0	107.1	107.4	54.5	75.3	74.9	74.1	62.5	82.6	91.2
8.9	27.8	54.1	49.1	49.4	30.8	55.3	51.6	51.5	36.3	54.4	51.6	51.4	27.5	50.0
8.8	18.0	16.2	15.9	17.6	17.1	16.8	16.0	14.9	14.4	16.8	15.4	15.7	---	16.5
1.0	15.6	14.7	14.8	15.8	15.7	15.7	13.5	12.8	12.9	15.9	14.8	14.4	---	14.3
1.8	11.6	10.4	10.2	9.3	8.9	8.1	10.3	9.5	9.3	10.4	9.3	9.9	---	9.6
1.8	48.4	50.9	49.3	53.5	52.9	45.5	46.4	45.7	48.6	50.0	45.5	43.8	---	48.9
1.4														

<sup>a</sup>No. 2½ can.

Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		June 15—		May 15, 1926	June 1927	June 15—		May 15, 1926	June 1927	June 15—		May 15, 1926	June 1927
		1913	1926			1913	1926			1913	1926		
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	22.5	36.1	36.4	37.0	22.5	39.0	38.0	39.2	23.5	33.4	34.5	35.1
Rib roast	do	19.4	33.0	33.8	34.5	21.0	34.6	34.2	35.0	21.0	30.6	31.2	31.5
Chuck roast	do	20.4	26.8	27.5	27.3	18.5	28.4	28.3	28.5	20.5	25.4	27.8	28.2
Plate beef	do	15.5	19.1	20.0	20.8	16.5	24.3	24.6	24.4	16.5	20.4	23.0	23.8
Pork chops	do	12.2	15.2	16.7	16.2	11.5	14.5	14.6	14.5	10.1	12.8	13.9	14.2
Bacon, sliced	do	20.0	38.0	31.1	30.0	19.5	41.6	33.3	30.2	18.3	40.0	33.5	31.5
Ham, sliced	do	30.0	45.2	42.0	40.5	27.3	50.2	46.7	45.9	26.7	54.1	47.7	47.3
Lamb, leg of	do	20.8	40.0	41.2	41.2	19.5	44.4	42.7	42.8	17.0	37.4	36.4	37.4
Hens	do	19.7	34.4	31.6	30.6	21.5	36.9	35.7	30.8	18.2	33.8	35.1	31.1
Salmon, canned, red	do	34.0	33.4	33.1	—	—	33.3	33.3	33.0	—	39.3	34.0	35.0
Milk, fresh	Quart	10.0	15.0	15.0	15.0	7.0	11.0	11.0	11.0	7.0	11.0	11.0	11.0
Milk, evaporated	15-16 oz. can	—	11.3	11.3	11.3	—	11.2	11.2	11.2	—	11.6	11.6	11.6
Butter	Pound	37.1	49.3	52.5	51.2	32.8	47.1	49.5	47.9	31.8	46.2	48.7	47.9
Oleomargarine (all butter substitutes)	do	26.9	25.1	25.1	—	—	27.1	26.4	26.4	—	28.7	25.5	25.4
Cheese	do	21.3	32.4	32.8	33.4	21.3	32.7	34.8	35.0	20.0	32.5	35.6	35.2
Lard	do	15.5	21.4	16.2	16.0	15.4	22.6	19.0	19.0	15.4	21.4	17.9	17.9
Vegetable lard substitute	do	23.7	19.3	20.0	—	—	26.6	26.7	26.5	—	27.4	26.7	26.7
Eggs, strictly fresh	Dozen	24.3	37.6	29.4	29.9	22.2	35.4	28.5	27.3	22.0	35.4	29.2	26.9
Bread	Pound	6.0	9.7	9.5	9.5	5.6	9.0	9.0	9.0	5.6	9.8	9.0	9.0
Flour	do	3.6	6.8	5.9	5.9	3.1	5.6	4.9	5.1	3.0	5.7	5.1	5.2
Corn meal	do	2.0	3.8	3.7	3.8	3.0	5.7	5.7	5.7	2.5	5.6	5.4	5.4
Rolled oats	do	—	9.4	9.1	9.1	—	8.5	8.4	8.4	—	8.4	8.2	8.1
Corn flakes	8-oz. pkg	—	11.1	10.0	9.8	—	10.3	9.5	9.3	—	10.7	10.0	10.6
Wheat cereal	28-oz. pkg	—	25.7	25.7	25.7	—	24.7	24.4	24.6	—	25.4	25.6	25.6
Macaroni	Pound	19.5	18.9	18.7	—	—	17.9	17.7	17.7	—	19.4	18.8	19.1
Rice	do	8.0	10.8	8.9	9.0	9.0	11.9	10.4	10.5	9.1	12.0	10.7	10.5
Beans, navy	do	—	9.5	8.3	8.9	—	8.3	8.0	8.3	—	9.1	9.2	9.3
Potatoes	do	—	1.7	5.4	5.3	6.6	1.1	4.5	3.8	5.5	0.8	4.6	3.8
Onions	do	—	—	5.9	7.5	6.5	—	7.5	9.5	9.5	—	8.5	9.2
Cabbage	do	—	5.0	6.8	7.6	7.8	—	6.0	9.4	10.9	—	7.1	9.4
Beans, baked	No. 2 can	—	11.7	11.3	11.3	—	11.0	11.0	11.0	—	12.1	12.3	11.8
Corn, canned	do	15.7	13.8	14.3	—	—	15.7	15.3	15.4	—	15.5	13.8	13.6
Peas, canned	do	17.0	14.8	15.1	—	—	16.4	15.2	15.2	—	15.3	13.9	13.8
Tomatoes, canned	do	10.5	9.9	9.8	—	—	13.1	13.4	13.2	—	13.9	13.3	13.3
Sugar, granulated	Pound	5.2	7.0	7.2	7.2	5.3	6.6	7.1	7.1	5.6	7.0	7.5	7.6
Tea	do	63.8	96.7	99.4	99.5	50.0	70.7	70.7	70.8	45.0	60.6	60.0	60.3
Coffee	do	27.5	51.0	47.8	47.6	27.5	47.0	42.5	42.5	30.8	53.8	51.9	50.7
Prunes	do	—	17.1	14.0	14.0	—	17.1	14.9	15.4	—	17.1	15.4	15.6
Raisins	do	—	15.6	14.5	14.5	—	14.7	14.8	14.6	—	15.1	15.0	15.1
Bananas	Dozen	—	29.7	28.4	28.6	—	29.9	29.3	29.4	—	21.5	21.3	21.3
Oranges	do	—	52.0	47.5	42.2	—	49.0	50.2	48.7	—	45.9	46.6	45.3

1 Whole.

## RETAIL PRICES OF FOOD

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## CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.			Newark, N. J.			New Haven, Conn.			New Orleans, La.			New York, N. Y.							
June 15, 1926	May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—		May 15, 1927	June 15—				
			1913	1926		1913	1926		1913	1926		1913	1926		1913	1926			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.			
35.0	34.5	35.0	27.2	46.5	46.2	47.0	32.4	54.0	55.8	56.6	22.5	35.9	36.9	36.3	26.3	46.1	46.5		
31.5	34.2	34.1	34.5	26.8	43.8	44.0	44.4	29.6	43.8	44.0	44.8	19.5	31.0	32.2	32.1	25.3	44.2	44.7	
28.2	29.2	28.6	28.6	21.6	35.5	35.9	35.4	24.2	36.0	37.6	37.9	19.4	30.2	31.1	30.8	22.5	39.0	39.6	
23.8	23.8	22.5	18.0	24.4	25.0	24.7	19.2	26.7	27.4	27.6	14.5	21.1	21.6	21.5	16.4	24.5	25.7		
14.2	18.2	18.0	18.2	12.8	13.5	13.3	12.9	—	15.5	16.0	16.1	10.9	16.8	17.4	17.5	15.3	20.1	20.1	
31.3	42.5	38.2	37.7	21.8	42.4	37.5	35.4	23.2	41.6	37.3	35.5	21.9	41.0	34.8	34.5	21.5	44.6	40.6	
47.3	50.4	47.7	47.3	24.4	48.3	45.6	45.3	28.8	52.3	48.3	47.5	29.7	49.4	48.1	48.0	26.0	52.3	49.0	
53.8	54.2	51.9	120.8	57.3	55.2	53.9	33.4	64.2	59.8	59.8	58.8	51.3	51.8	29.5	63.2	61.0	59.0		
37.4	41.4	41.4	40.6	21.2	44.5	42.0	42.1	20.8	43.9	42.5	42.8	21.3	41.0	40.4	40.4	17.2	41.3	41.7	
31.1	39.0	36.8	35.6	23.8	41.9	39.1	37.6	23.7	44.8	42.0	40.9	20.0	39.6	37.2	35.3	22.1	44.9	40.8	
35.0	41.0	31.2	31.2	—	37.1	30.0	30.0	—	34.1	30.8	31.0	—	38.1	37.5	36.9	—	36.0	30.2	30.4
11.0	18.5	17.8	17.8	9.0	15.0	15.0	15.0	9.0	15.0	16.0	16.0	10.0	14.0	14.0	14.0	9.0	15.0	15.0	
11.0	11.7	11.6	11.7	—	11.1	11.2	11.2	—	11.9	12.1	12.0	—	11.1	11.2	11.3	—	11.1	11.1	11.1
47.9	53.9	57.5	54.1	36.4	51.0	54.4	52.7	34.2	49.2	54.9	52.4	35.0	50.8	55.2	51.9	34.5	50.9	53.9	
25.4	31.5	29.6	29.1	—	30.5	30.7	30.4	—	30.9	31.0	30.3	—	30.3	29.0	28.7	—	29.6	28.7	
35.2	34.6	36.0	35.6	24.2	40.2	39.7	39.7	22.0	38.3	39.3	39.4	22.0	33.8	37.0	37.4	19.4	37.8	38.6	
17.9	22.3	19.1	19.2	15.8	22.3	19.1	19.2	15.7	22.5	18.4	18.4	14.9	21.9	19.4	19.1	16.1	23.2	19.9	
26.7	22.1	20.4	20.4	—	25.8	25.5	25.7	—	25.7	25.5	25.6	—	23.1	19.2	19.0	—	26.0	26.1	
26.9	36.7	30.2	29.6	34.6	49.3	43.0	41.2	35.0	50.3	43.6	45.3	25.6	39.2	32.1	32.4	32.8	51.1	45.5	
9.0	9.7	10.1	10.1	5.6	9.3	9.6	9.6	6.0	9.2	9.2	9.2	5.2	8.9	8.8	8.7	6.2	9.6	9.7	
5.2	6.7	6.1	6.1	3.6	6.2	5.5	5.6	3.2	6.1	5.4	5.5	3.8	7.5	6.7	6.7	3.3	6.1	5.5	
5.4	3.8	4.0	3.6	6.6	6.4	6.5	6.5	3.0	7.0	6.8	6.9	2.6	3.8	4.1	4.1	3.5	6.3	6.5	
8.1	8.7	8.5	8.3	—	8.4	8.5	8.3	—	9.4	9.3	9.1	—	9.1	8.9	9.0	—	8.5	8.7	
10.6	11.3	9.7	9.7	—	10.0	9.8	9.5	—	10.8	10.2	10.1	—	10.4	10.0	9.8	—	10.0	9.5	9.4
25.6	25.8	24.8	24.4	—	24.3	24.1	24.1	—	24.8	24.7	24.7	—	24.6	24.9	24.7	—	23.9	24.0	
19.1	21.4	20.9	20.9	—	21.1	20.9	20.9	—	22.0	22.4	22.1	—	9.4	10.4	10.7	—	20.9	20.9	
10.5	11.3	10.0	9.8	9.0	11.3	10.6	10.5	9.3	11.9	11.2	10.8	7.4	10.1	9.6	9.9	8.0	10.7	9.7	
9.3	8.7	8.4	8.8	—	9.7	9.7	9.7	—	9.5	9.3	9.5	—	8.5	7.9	8.2	—	10.1	10.1	10.2
5.5	4.9	5.0	6.6	2.9	5.6	5.2	5.6	2.0	4.9	4.2	5.7	2.0	3.6	4.4	6.3	2.8	10.1	4.6	5.4
9.1	6.3	7.3	7.5	—	7.9	9.6	9.3	—	8.1	9.0	9.8	—	4.0	5.2	5.1	—	7.1	9.0	9.1
11.4	4.0	4.6	6.9	—	6.6	8.8	8.7	—	6.9	9.7	10.6	—	4.4	4.9	7.5	—	6.9	8.4	9.3
11.8	10.7	10.6	10.8	—	10.8	10.8	10.7	—	11.4	11.1	11.1	—	10.9	11.0	10.8	—	10.9	10.6	10.6
13.6	17.7	16.6	15.9	—	16.6	15.2	15.0	—	18.5	18.7	18.7	—	13.9	15.3	15.3	—	14.9	14.1	13.8
13.8	16.1	15.7	15.9	—	17.2	16.4	15.9	—	19.5	19.2	19.0	—	17.2	16.9	16.9	—	15.4	14.7	14.8
3.3	11.0	11.0	10.8	—	11.2	11.5	11.5	—	11.9	12.9	12.0	—	10.0	11.4	11.1	—	10.5	11.4	11.5
7.6	6.9	7.4	7.3	5.1	6.2	6.6	6.9	5.1	6.7	7.3	7.3	5.1	6.2	6.8	6.9	4.8	6.1	6.3	6.5
0.3	81.5	77.3	77.3	53.8	63.8	62.8	62.8	55.0	58.9	57.4	57.4	62.1	82.6	80.1	78.1	43.3	65.0	66.3	66.3
0.7	49.5	48.3	48.1	29.3	50.3	46.5	47.4	33.8	52.5	50.3	49.7	26.7	36.3	35.6	35.6	27.5	47.7	44.5	44.6
5.6	17.2	14.3	16.2	—	15.7	14.5	14.5	—	16.4	15.8	15.7	—	18.1	16.7	17.3	—	15.8	13.5	13.6
5.1	14.6	14.4	14.3	—	14.0	14.5	14.3	—	14.1	14.2	14.2	—	14.3	13.7	13.8	—	14.6	13.5	14.0
1.3	23.9	22.8	23.9	—	37.5	37.5	36.7	—	34.5	33.2	33.6	—	16.3	17.1	17.1	—	39.2	38.9	36.6
5.3	50.5	43.0	50.5	—	55.2	51.4	50.8	—	52.1	53.1	53.7	—	50.3	48.0	51.3	—	59.1	57.0	56.6

\* Per pound. <sup>1</sup> Data not available for Mobile. <sup>2</sup> Data not available for Newark, Conn., New Haven, Conn., and New Orleans, La. <sup>3</sup> Data not available for Newark, Conn., and New Haven, Conn.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Norfolk, Va.			Omaha, Nebr.			Peoria, Ill.		
		June 15, 1926	May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15, 1926	May 15, 1927
					1913	1926				
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	41.2	41.1	40.9	25.1	37.7	38.0	37.7	35.2	36.8
Rib roast	do	34.1	34.9	34.9	22.0	34.9	35.6	35.5	34.6	34.8
Chuck roast	do	32.4	33.4	32.3	18.1	26.3	26.7	26.5	25.6	25.3
Plate beef	do	22.9	23.6	23.5	15.1	21.9	22.8	22.3	21.1	22.1
Pork chops	do	15.7	15.8	15.7	10.4	12.6	13.3	13.3	13.8	14.3
Bacon, sliced	do	39.8	36.7	35.7	18.7	40.1	34.4	33.6	37.7	33.0
Ham, sliced	do	49.5	44.5	44.4	27.5	54.6	50.7	50.2	52.3	49.6
Lamb, leg of	do	49.6	49.5	49.4	29.0	61.1	57.6	56.3	58.5	55.4
Hens	do	41.1	38.2	37.1	17.6	34.2	32.5	31.0	36.4	35.2
Salmon, canned, red	do	37.8	34.2	33.9	—	39.2	35.1	34.8	39.8	34.3
Milk, fresh	Quart	17.5	17.5	17.5	7.9	10.3	10.3	10.3	11.3	13.0
Milk, evaporated	15-16 oz. can	11.2	11.4	11.6	—	11.8	11.8	11.8	11.5	11.1
Butter	Pound	53.6	57.1	56.2	34.0	46.5	52.1	50.6	47.7	50.9
Oleomargarine (all butter substitutes)	do	29.2	28.3	28.7	—	30.0	26.3	26.1	29.8	28.2
Cheese	do	32.3	35.1	35.1	22.3	34.2	36.4	36.1	34.2	36.4
Lard	do	21.3	18.9	18.6	17.3	24.3	20.9	20.5	22.7	19.2
Vegetable lard substitutes	do	22.3	21.8	22.7	—	27.6	26.4	27.4	27.3	27.5
Eggs, strictly fresh	Dozen	39.9	32.1	33.2	22.8	34.3	27.9	26.9	35.1	27.5
Bread	Pound	9.9	9.9	9.9	5.2	10.1	10.1	10.1	10.1	10.0
Flour	do	6.2	5.7	5.6	2.8	5.3	4.6	4.6	5.9	5.3
Corn meal	do	4.3	4.3	4.5	2.3	4.9	4.7	4.6	4.8	4.9
Rolled oats	do	8.4	8.7	8.8	—	10.3	10.2	10.2	8.9	8.9
Corn flakes	8-oz. pkg	10.3	9.8	9.7	—	12.4	11.1	10.9	11.8	10.4
Wheat cereal	28-oz. pkg	24.1	24.5	25.2	—	28.3	28.0	28.0	25.3	26.3
Macaroni	Pound	19.1	19.1	19.1	—	21.1	21.2	21.2	20.2	18.7
Rice	do	12.0	11.6	11.6	8.5	11.7	10.8	11.3	11.9	11.4
Beans, navy	do	8.2	8.1	8.0	—	9.7	9.6	10.0	8.5	8.7
Potatoes	do	5.5	5.6	6.2	1.8	4.8	4.4	6.5	4.9	4.2
Onions	do	7.6	8.2	8.1	—	9.0	9.3	9.3	8.3	9.8
Cabbage	do	4.9	7.3	6.5	—	6.1	9.1	11.7	6.5	8.9
Beans, baked	No. 2 can	10.0	9.7	9.7	—	13.7	13.3	13.4	11.9	11.1
Corn, canned	do	15.5	14.9	15.0	—	15.8	16.1	16.3	15.6	14.9
Peas, canned	do	19.7	18.9	19.1	—	16.4	15.5	15.5	18.0	17.6
Tomatoes, canned	do	10.3	9.9	9.9	—	14.1	12.8	13.1	13.8	12.6
Sugar, granulated	Pound	6.5	6.9	7.0	5.7	7.1	7.9	7.8	7.6	8.4
Tea	do	88.8	92.7	94.5	56.0	78.5	78.8	79.1	66.7	70.2
Coffee	do	50.2	48.2	47.8	30.0	57.5	53.6	53.6	51.8	48.6
Prunes	do	16.8	15.3	15.7	—	17.7	16.6	16.4	20.0	17.9
Raisins	do	14.4	14.1	14.2	—	15.8	15.6	15.6	15.2	14.5
Bananas	Dozen	33.8	32.5	34.1	—	11.7	11.3	10.5	10.4	10.2
Oranges	do	51.1	52.5	56.7	—	43.4	47.1	44.8	47.0	54.1

<sup>1</sup> The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

## RETAIL PRICES OF FOOD

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CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

III. June 15, 1927	Philadelphia, Pa.			Pittsburgh, Pa.			Portland, Me.			Portland, Oreg.			Providence, R. I.			
	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927
	1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
30.0	156.3	157.8	157.7	27.2	48.0	47.9	47.6	63.0	63.5	62.9	23.5	29.4	31.3	31.2	39.6	73.0
34.8	42.3	43.8	44.0	23.7	39.5	40.0	40.1	47.0	48.6	48.4	21.2	26.9	28.7	28.6	31.0	50.3
25.3	22.3	37.7	37.3	37.9	22.0	34.4	34.3	34.7	31.0	31.6	31.2	19.5	25.2	26.4	26.4	23.8
21.8	17.6	25.7	27.3	27.0	17.0	24.8	26.6	26.7	21.8	22.9	22.0	16.9	18.3	20.3	20.0	18.8
14.6	12.3	12.7	13.6	13.3	11.5	12.4	13.5	16.7	18.5	18.5	13.9	13.1	14.7	14.4	18.0	18.6
31.7	20.8	47.0	41.4	39.0	22.0	45.3	39.6	38.4	42.1	37.2	35.4	21.6	43.1	35.8	34.9	21.8
50.0	27.1	49.5	46.4	46.1	29.0	56.1	53.2	52.8	46.0	44.9	43.7	30.6	57.1	54.6	54.3	46.4
53.3	31.6	65.7	60.3	59.8	29.6	68.0	62.6	61.0	60.0	58.2	57.7	30.8	58.3	56.6	56.0	32.3
41.9	21.4	46.2	43.7	44.2	21.4	44.5	43.8	44.8	42.8	41.7	41.0	18.1	36.6	38.1	37.8	20.0
34.3	23.2	44.0	41.8	39.5	24.8	44.6	43.9	43.2	42.9	42.0	41.8	20.0	36.3	36.3	32.1	24.8
33.1	38.1	27.6	27.8	—	37.7	30.1	30.1	39.4	30.4	30.2	—	36.5	32.4	33.7	—	37.9
13.0	8.0	12.0	13.0	13.0	8.6	13.0	14.0	13.5	13.8	13.8	9.3	12.2	12.0	12.0	9.0	13.8
11.3	11.4	11.6	11.6	—	11.5	11.2	11.3	12.4	12.5	12.5	—	10.4	10.6	10.7	—	12.2
49.0	39.7	54.4	57.1	54.7	36.7	51.9	55.0	52.8	52.8	57.6	55.4	35.0	42.2	50.2	49.7	36.2
27.9	29.6	28.4	28.3	—	30.2	30.4	30.4	29.4	28.0	27.5	—	30.2	28.8	28.9	—	29.4
26.0	25.0	39.2	39.8	39.4	24.5	39.3	40.1	40.4	37.9	37.9	37.9	20.5	37.4	37.1	37.4	21.7
19.2	15.3	22.4	18.3	17.5	15.5	22.2	19.3	18.5	21.6	18.3	18.2	18.2	24.0	21.2	20.5	15.2
27.8	25.5	25.7	25.7	—	26.8	27.5	27.5	24.8	25.6	25.7	—	28.0	28.6	28.7	—	26.8
25.5	27.7	44.2	35.8	35.1	25.5	42.4	36.4	36.6	45.2	40.4	40.4	26.3	36.3	29.3	29.1	32.8
0.0	4.8	9.4	9.4	9.4	5.4	9.3	9.1	9.1	10.1	10.0	10.0	10.0	5.6	9.4	9.3	9.3
5.3	3.2	6.0	5.3	5.4	3.2	5.8	5.1	5.2	6.0	5.3	5.5	2.9	5.2	5.0	5.1	3.5
4.9	2.7	4.7	4.8	4.7	2.7	5.9	5.9	5.9	5.1	5.1	5.1	3.3	5.0	5.6	5.5	2.8
8.9	—	8.6	8.7	8.6	—	9.3	9.2	9.3	8.0	7.8	8.0	—	10.2	10.6	10.5	—
0.2	—	10.0	9.8	9.6	—	10.7	10.1	10.0	11.6	10.8	10.1	—	11.3	10.1	10.1	—
1.3	24.3	24.7	24.7	—	25.1	25.2	25.1	25.9	25.9	25.9	25.7	—	26.5	26.6	26.7	—
1.6	21.0	21.0	20.5	—	23.3	23.5	23.5	24.7	24.7	24.7	24.7	—	17.7	18.5	17.5	—
1.4	9.8	12.3	11.4	11.3	9.2	12.6	11.8	11.7	12.9	12.5	12.6	8.6	11.2	10.3	10.4	9.3
7.7	8.9	9.0	9.0	—	8.0	8.5	8.7	9.5	9.3	9.5	—	9.5	9.9	10.2	—	9.1
9.2	2.5	5.6	6.0	1.7	5.6	4.3	6.0	4.4	3.8	5.2	0.6	4.0	3.3	4.4	1.8	4.8
2.2	7.2	8.6	8.7	—	8.1	9.4	9.4	7.6	9.4	9.0	—	5.6	8.8	8.6	—	7.7
1.1	7.0	8.9	8.7	—	6.9	9.6	10.6	6.5	8.9	10.6	—	4.1	9.9	9.1	—	6.4
1.8	10.5	10.6	10.7	—	12.7	12.3	12.3	15.4	14.4	14.3	—	13.4	12.7	12.5	—	11.3
1.1	14.6	14.2	14.1	—	17.0	15.9	15.8	16.1	14.1	14.4	—	19.2	19.2	19.0	—	17.6
1.8	14.5	15.0	14.8	—	16.8	16.9	16.7	18.4	17.6	17.8	—	19.2	19.2	18.4	—	17.4
1.1	11.0	12.1	12.2	—	12.0	12.5	12.1	12.1	12.7	12.6	—	16.9	17.0	17.2	—	19.5
4.9	6.6	6.7	6.7	5.5	7.0	7.4	7.6	6.8	7.3	6.2	7.3	7.2	7.5	5.0	6.7	7.1
54.0	72.7	68.0	67.7	58.0	85.9	83.0	83.7	61.3	62.1	62.2	55.0	76.6	76.9	76.9	48.3	61.9
25.0	45.2	41.4	39.5	30.0	49.7	49.2	47.4	53.6	50.9	49.9	35.0	52.6	51.3	50.3	30.0	54.2
14.7	14.7	13.3	13.3	—	18.5	16.6	16.7	15.6	14.5	14.5	—	14.3	10.3	11.0	—	16.4
13.8	13.8	13.6	13.7	—	14.4	14.2	14.2	13.7	13.3	13.5	—	14.0	13.8	13.7	—	14.0
31.1	31.1	31.4	30.2	—	40.0	38.6	37.7	10.6	10.8	10.7	—	12.9	12.5	12.2	—	14.2
52.5	52.5	50.7	50.3	—	49.8	49.8	52.9	56.8	53.4	55.1	—	44.4	47.5	46.5	—	33.0
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.1

\* No. 2½ can.

\* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Richmond, Va.				Rochester, N.Y.				St. Louis, Mo.			
		June 15—				June 15—				June 15—			
		1913	1926	May 15, 1927	June 15, 1927	June 15, 1926	May 15, 1927	June 15, 1927	May 15, 1927	1913	1926	May 15, 1927	June 15, 1927
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	21.8	39.8	40.1	40.0	41.6	41.2	41.5	23.7	37.5	37.4	37.4	37.4
Rib roast	do	19.6	35.1	35.6	35.6	34.9	34.7	34.7	22.2	36.3	36.4	36.6	36.6
Chuck roast	do	18.9	32.1	32.5	32.5	30.0	30.8	30.9	18.3	30.7	30.6	30.3	30.3
Plate beef	do	15.3	23.3	23.8	24.2	24.6	25.2	24.9	14.3	21.1	21.7	21.5	21.5
Pork chops	do	12.3	16.5	17.0	17.2	13.6	14.0	13.9	10.7	14.0	14.8	14.1	14.1
Bacon, sliced	do	20.8	41.9	36.7	36.3	45.5	39.7	37.4	18.2	38.9	31.3	29.7	29.7
Ham, sliced	do	25.0	47.1	44.3	44.3	46.5	43.7	42.3	26.0	48.8	43.4	42.5	42.5
Lamb, leg of	do	19.3	46.1	46.3	45.2	43.9	41.9	40.5	18.0	39.7	39.4	40.4	40.4
Hens	do	21.3	39.8	37.3	35.4	45.2	42.0	41.0	18.5	38.6	36.2	33.6	33.6
Salmon, canned, red	do	36.2	34.1	34.4	34.2	38.2	31.5	30.7	—	39.1	33.7	33.6	33.6
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	12.5	12.5	8.0	13.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can	12.5	12.2	12.3	11.6	11.5	11.5	—	10.4	10.9	10.8	—	—
Butter	Pound	38.6	56.4	60.2	58.5	49.5	52.6	51.5	34.4	51.1	53.9	52.7	52.7
Oleomargarine (all butter substitutes)	do	31.9	31.6	31.4	30.7	29.4	29.3	—	28.3	26.7	26.9	26.9	26.9
Cheese	do	22.3	35.9	36.5	36.1	35.6	36.5	34.7	19.3	32.5	35.4	35.6	35.6
Lard	do	15.0	22.0	18.0	18.0	21.1	17.7	17.4	13.6	19.6	15.1	15.0	15.0
Vegetable lard substitute	do	25.7	25.3	25.9	24.0	24.0	24.0	—	—	26.2	25.8	25.9	25.9
Eggs, strictly fresh	Dozen	25.0	40.1	30.2	31.8	39.6	30.9	31.6	21.4	35.9	28.5	27.7	27.7
Bread	Pound	5.4	9.5	9.4	9.4	8.9	9.0	9.0	5.5	9.8	9.9	9.9	9.9
Flour	do	3.3	6.0	5.4	5.4	5.8	5.4	5.5	3.0	5.7	5.2	5.2	5.2
Corn meal	do	2.0	4.8	4.6	4.8	6.4	5.2	5.4	2.2	4.3	4.3	4.3	4.5
Rolled oats	do	—	9.1	8.5	8.6	9.2	9.0	9.2	—	8.7	8.4	8.4	8.4
Corn flakes	8-oz. pkg	11.1	9.8	9.8	10.3	9.8	9.5	—	10.1	9.2	9.2	9.2	9.2
Wheat cereal	28-oz. pkg	25.8	25.6	25.6	24.9	24.5	24.5	—	24.3	24.7	24.7	24.7	24.7
Macaroni	Pound	20.2	20.2	20.4	22.5	19.5	19.5	—	21.0	19.7	19.7	19.7	19.7
Rice	do	10.0	13.3	12.0	11.9	10.6	10.4	10.4	8.3	10.8	10.2	10.1	10.1
Beans, navy	do	9.1	8.7	8.8	9.5	8.7	8.7	—	7.6	7.7	7.8	7.8	7.8
Potatoes	do	2.1	6.2	5.5	6.8	5.1	4.3	5.8	1.7	5.5	4.9	6.6	6.6
Onions	do	—	8.1	8.8	9.0	7.7	8.6	8.3	—	6.4	7.3	7.7	7.7
Cabbage	do	—	4.9	8.2	5.3	6.1	7.6	9.8	—	5.7	10.1	9.6	9.6
Beans, baked	No. 2 can	10.0	10.1	10.1	10.5	10.3	10.5	—	10.8	10.2	10.4	—	—
Corn, canned	do	15.3	15.1	14.8	16.0	15.0	14.7	—	16.3	15.5	15.6	—	—
Peas, canned	do	20.1	19.3	19.3	18.4	16.9	16.9	—	16.9	15.3	15.0	—	—
Tomatoes, canned	do	10.0	10.5	10.5	13.3	12.7	13.1	—	11.6	11.3	11.5	—	—
Sugar, granulated	Pound	5.0	6.8	7.1	7.2	6.3	6.9	6.9	5.0	7.0	7.2	7.2	7.2
Tea	do	56.0	90.4	92.7	91.4	66.9	69.8	69.8	55.0	73.9	76.5	76.1	76.1
Coffee	do	26.8	49.9	47.6	46.6	48.6	43.9	42.9	24.3	47.7	46.6	46.0	46.0
Prunes	do	—	18.8	14.9	15.4	17.7	16.6	15.8	—	19.3	18.0	18.0	—
Raisins	do	—	14.7	14.3	14.3	14.2	14.6	14.6	—	14.7	14.2	14.1	—
Bananas	Dozen	—	37.3	36.8	40.5	37.7	36.0	35.0	—	32.3	31.8	31.5	—
Oranges	do	—	55.8	47.5	49.6	49.5	48.1	47.0	—	45.2	48.6	47.2	—

<sup>1</sup> No. 2½ can.

## RETAIL PRICES OF FOOD

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## CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.			Salt Lake City, Utah			San Francisco, Calif.			Savannah, Ga.			Scranton, Pa.		
June 15—		May 15, 1926	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927	June 15—		May 15, 1927
1913	1926	1927	1913	1926	1927	1913	1926	1913	1926	1927	1913	1926	1913	1926
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
25.9	36.8	37.2	37.8	22.9	30.5	33.9	33.8	20.7	31.7	33.5	33.3	36.5	36.0	35.0
23.0	31.9	32.4	32.7	20.0	27.2	31.3	31.3	19.0	29.0	30.7	30.5	28.5	28.5	28.0
21.0	29.7	30.7	30.9	19.9	23.4	26.6	26.2	21.0	29.6	30.7	30.2	27.0	27.5	23.5
17.1	23.9	24.6	25.0	15.7	18.5	20.1	19.8	14.6	18.5	20.0	19.6	18.8	19.3	19.8
10.8	13.5	13.7	14.1	12.0	11.9	14.8	14.5	13.3	14.3	15.5	15.1	15.2	15.3	14.9
18.9	40.3	33.9	29.9	23.1	39.3	36.1	34.3	23.7	44.8	42.0	41.2	37.8	32.5	32.0
26.7	51.7	45.5	45.0	31.7	50.2	48.4	48.1	33.9	64.2	58.8	58.9	46.8	43.3	43.3
28.3	56.6	52.2	50.3	30.7	58.1	59.3	59.3	30.0	67.3	64.8	64.3	47.1	45.5	45.9
19.1	37.3	37.4	36.4	18.8	37.2	39.1	39.4	16.7	38.2	39.1	39.1	41.0	39.0	39.6
20.3	34.1	33.3	28.7	24.3	33.5	32.6	31.4	23.4	45.3	43.3	42.9	37.3	34.8	32.6
37.8	36.3	36.3	—	—	35.9	35.1	35.1	—	36.8	30.1	29.9	40.2	33.0	33.1
6.4	11.0	11.0	11.0	8.7	10.0	10.3	10.3	10.0	14.0	14.0	14.0	17.0	17.0	8.4
12.1	11.9	11.7	—	10.6	10.6	10.6	—	10.2	10.0	10.3	11.3	11.4	11.4	11.8
32.9	46.3	47.9	46.8	34.4	47.3	49.7	48.5	34.6	50.4	51.5	51.5	53.5	54.5	53.1
28.3	25.1	24.8	—	29.7	29.0	29.1	—	30.8	30.4	30.2	34.9	32.1	32.7	29.4
21.0	34.2	35.7	35.8	23.3	29.9	30.7	30.7	19.0	37.7	39.1	38.8	34.1	35.2	35.8
15.0	22.1	18.3	18.4	19.2	25.1	22.1	21.5	18.4	24.7	22.8	23.0	23.4	18.4	18.8
27.2	28.1	28.1	—	29.4	29.2	29.2	—	27.9	28.6	28.4	20.6	16.7	16.6	22.5
22.5	35.5	29.4	26.7	24.4	33.5	28.3	27.5	29.6	40.0	32.2	32.7	41.1	32.0	33.2
5.9	10.2	10.0	10.0	5.9	9.8	9.7	9.7	5.9	9.8	9.5	9.5	10.6	10.8	10.6
3.1	5.9	5.3	5.3	2.6	4.6	4.0	4.2	3.4	5.9	5.7	5.8	7.0	6.6	6.6
2.5	5.4	5.2	5.2	3.3	5.2	5.5	5.5	3.4	6.4	6.5	6.5	3.5	3.4	3.7
9.6	9.6	10.2	10.2	8.9	8.9	8.8	8.8	9.5	9.9	9.8	8.9	8.6	8.5	10.1
12.0	10.9	10.9	—	12.1	11.4	11.3	—	10.6	10.1	10.1	10.2	9.6	9.9	11.1
26.4	26.4	26.4	—	25.4	25.5	25.5	—	25.5	25.4	25.4	24.4	24.3	24.3	25.8
18.7	18.7	18.7	—	20.3	20.0	19.9	—	16.1	15.7	15.6	18.4	18.2	18.3	23.7
10.0	12.1	10.7	10.6	8.2	11.4	9.0	9.2	8.5	12.0	11.2	11.5	10.6	9.8	8.5
9.2	9.6	9.5	—	10.0	8.9	9.1	—	9.6	9.5	9.9	10.6	9.2	9.6	11.1
4.5	3.8	5.1	1.2	4.3	4.0	6.2	2.1	4.3	4.3	5.5	5.5	4.8	6.4	1.7
8.0	9.8	10.1	—	7.5	7.7	8.4	—	4.6	7.7	7.7	8.1	8.5	8.6	8.1
6.4	9.1	12.8	—	6.0	9.0	9.8	—	—	—	4.6	4.6	6.0	—	7.0
13.4	13.6	13.6	—	14.1	13.5	13.8	—	14.1	12.8	12.7	12.5	12.1	12.2	11.0
15.2	14.0	14.3	—	15.5	14.4	14.2	—	18.6	17.8	17.7	16.2	15.2	15.2	17.2
16.1	15.3	15.3	—	15.9	15.7	15.5	—	18.9	17.9	17.9	16.9	17.0	16.8	17.7
14.3	14.3	14.3	—	14.8	13.6	13.5	—	15.2	14.6	15.0	9.9	10.2	10.1	11.9
7.4	7.5	7.5	5.9	7.6	8.1	8.1	5.3	6.7	7.1	7.0	6.8	7.1	5.3	6.7
69.6	68.7	68.1	65.7	87.3	86.5	86.5	50.0	68.8	71.8	71.3	79.6	81.5	79.8	66.8
52.2	51.9	51.5	35.8	56.6	54.9	55.1	32.0	53.6	52.0	52.0	48.9	45.5	45.2	31.3
17.5	15.7	15.5	—	15.3	14.8	14.6	—	15.4	13.1	13.0	16.3	13.9	14.6	18.3
15.7	15.6	15.6	—	14.3	13.6	13.6	—	13.0	13.1	13.2	14.5	14.5	14.5	14.9
12.0	10.6	10.5	—	15.0	21.3	21.1	2	33.9	30.0	30.6	34.3	28.7	30.0	34.0
49.9	50.7	47.0	—	42.4	45.0	44.7	—	47.1	50.8	47.8	49.7	41.3	43.5	54.2

<sup>1</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Article	Unit	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		June 15—		May 15, 1927	June 15, 1927	June 15, 1926	May 15, 1927	June 15, 1927	June 15—		May 15, 1927	June 15, 1927
		1913	1926						1913	1926		
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	23.8	34.1	35.7	35.0	35.9	37.5	37.5	27.5	47.2	46.5	46.6
Rib roast	do	21.5	30.5	32.9	31.2	35.2	36.7	36.7	23.9	40.4	40.5	40.6
Chuck roast	do	20.0	27.1	28.7	28.1	23.9	25.4	24.6	21.6	34.6	33.8	34.1
Plate beef	do	16.8	20.0	21.7	20.6	22.2	22.5	22.1	17.9	24.3	25.0	24.8
Pork chops	do	24.2	45.0	38.7	36.8	38.5	31.4	30.4	20.9	45.5	39.6	37.6
Bacon, sliced	do	31.7	61.4	58.2	57.7	49.6	47.1	46.3	26.8	53.2	46.6	45.8
Ham, sliced	do	30.8	63.3	62.3	60.0	56.4	53.3	53.3	30.0	62.0	58.2	57.6
Lamb, leg of	do	20.8	37.6	38.0	37.4	44.0	42.8	43.3	20.9	48.1	45.7	44.4
Hens	do	24.3	36.0	35.4	33.6	36.6	36.1	34.2	22.6	44.9	41.3	39.7
Salmon, canned, red	do	—	—	38.8	34.9	34.4	42.4	35.6	34.8	—	37.9	31.3
Milk fresh	Quart	8.5	13.0	12.0	12.0	12.5	12.5	12.5	8.0	14.0	15.0	15.0
Milk, evaporated	15-16 oz. can	10.8	10.7	10.7	11.8	11.8	11.8	—	—	12.0	12.6	11.9
Butter	Pound	35.0	49.7	51.2	50.9	49.3	52.1	50.7	37.4	54.3	56.6	54.4
Oleomargarine (all butter substitutes)	do	—	30.7	28.2	28.3	30.3	28.2	28.2	—	31.4	28.7	23.9
Cheese	do	21.7	36.0	34.8	34.9	35.8	36.8	36.8	22.8	37.8	40.2	39.9
Lard	do	17.7	24.3	21.0	20.6	22.8	18.8	18.3	14.8	22.8	17.4	17.5
Vegetablelard substitute	do	—	27.9	26.9	27.6	28.0	27.9	27.5	—	25.6	24.5	24.6
Eggs, strictly fresh	Dozen	28.5	37.2	32.3	31.7	35.7	28.8	26.3	25.6	43.9	34.7	35.2
Bread	Pound	5.5	9.7	9.7	9.7	10.1	10.4	10.4	5.7	8.2	9.1	9.0
Flour	do	2.9	5.0	5.1	5.2	6.3	5.5	5.6	3.8	6.7	5.6	5.7
Corn meal	do	3.1	5.0	5.5	5.8	5.2	4.7	4.8	2.5	5.1	5.2	5.2
Rolled oats	do	—	8.9	8.9	9.0	10.0	10.0	10.4	—	9.2	9.3	9.4
Corn flakes	8-oz. pkg	—	11.9	10.5	10.4	11.8	10.3	11.0	—	10.6	9.7	9.6
Wheat cereal	28-oz. pkg	—	27.5	27.6	27.2	26.4	26.9	27.5	—	24.9	24.4	24.5
Macaroni	Pound	—	18.3	18.2	18.2	19.1	19.0	18.9	—	23.7	22.5	22.4
Rice	do	7.7	12.9	12.0	12.0	11.2	10.9	10.9	0.6	13.0	11.6	11.4
Beans, navy	do	—	10.2	9.8	10.7	8.6	8.7	8.8	—	8.7	8.5	8.7
Potatoes	do	—	1.1	4.0	3.9	5.2	5.1	4.9	6.2	1.9	5.8	5.4
Onions	do	—	—	5.6	10.2	8.8	8.9	10.4	10.0	—	8.0	8.6
Cabbage	do	—	—	5.0	10.5	10.0	6.8	9.5	11.5	—	6.5	8.8
Beans, baked	No. 2 can	—	13.2	12.1	12.0	11.5	10.6	10.7	—	10.4	10.3	10.0
Corn, canned	do	—	19.0	16.9	16.9	15.6	14.9	14.7	—	16.0	15.2	14.4
Peas, canned	do	—	20.1	19.2	18.4	17.0	16.2	15.4	—	16.7	16.6	15.9
Tomatoes, canned	do	—	17.8	16.7	17.2	13.7	14.0	13.8	—	10.5	10.1	10.1
Sugar, granulated	Pound	5.9	7.1	7.2	7.4	7.5	8.0	7.9	4.9	6.8	7.1	7.1
Ten	do	50.0	78.2	76.5	76.5	79.3	82.7	84.5	57.5	91.1	93.2	91.7
Coffee	do	28.0	52.7	49.5	49.1	52.9	50.6	49.8	28.8	48.6	43.6	42.2
Prunes	do	—	15.6	13.8	13.7	17.3	15.5	15.4	—	18.5	16.4	16.6
Raisins	do	—	14.7	13.0	14.1	15.4	15.8	15.4	—	14.8	14.4	14.3
Bananas	Dozen	—	13.6	12.0	12.2	10.3	9.2	9.5	—	36.7	31.6	31.3
Oranges	do	—	46.9	47.9	45.2	50.3	52.1	44.9	—	53.3	49.5	52.2

<sup>1</sup> No. 2½ can.<sup>2</sup> Per pound.

## Changes in Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food <sup>3</sup> in June, 1927, compared with the average cost in the year 1913, in June, 1926, and in May, 1927. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at

<sup>3</sup> For list of articles see note 5, p. 159.

different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.<sup>4</sup>

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN JUNE, 1927, COMPARED WITH THE COST IN MAY, 1927, AND IN JUNE, 1926, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percent-age increase, June, 1927, compared with 1913	Percent-age decrease, June, 1927, compared with June, 1926	Percent-age increase, June, 1927, compared with May, 1927	City	Percent-age increase, June, 1927, compared with 1913	Percent-age decrease, June, 1927, compared with June, 1926	Percent-age increase, June, 1927, compared with May, 1927
Atlanta	64.5	0.3	4.2	Minneapolis	59.4	1.6	3.3
Baltimore	62.3	3.4	0	Mobile	0.7	2.0	
Birmingham	59.7	4.5	0.1	Newark	50.4	1.9	0.1
Boston	57.4	0.7	0.8	New Haven	58.9	1.4	2.5
Bridgeport	10.9	2.2		New Orleans	54.7	1.4	2.4
Buffalo	62.0	2.6	1.5	New York	60.7	1.3	1.1
Butte		11.5	3.0	Norfolk		0.9	0.6
Charleston, S. C.	55.1	3.7	0.2	Omaha	59.7	1.2	4.0
Chicago	72.6	10.6	3.6	Peoria		0.9	2.8
Cincinnati	64.1	11.2	4.9	Philadelphia	60.7	1.7	0.5
Cleveland	60.4	2.1	2.2	Pittsburgh	61.3	0.3	2.5
Columbus		11.7	4.0	Portland, Me.		0.5	1.9
Dallas	51.6	1.7	0.6	Portland, Oreg.	40.6	0.4	1.4
Denver	47.9	11.0	5.0	Providence	57.8	1.0	1.3
Detroit	70.3	0.3	3.3	Richmond	65.6	2.7	1.4
Fall River	56.3	10.3	2.4	Rochester		1.4	2.6
Houston		3.0	2.2	St. Louis	64.0	0.9	2.5
Indianapolis	58.5	10.8	4.1	St. Paul		1.9	2.2
Jacksonville	50.6	5.5	2.0	Salt Lake City	42.1	4.4	4.4
Kansas City	56.2	2.6	3.1	San Francisco	51.7	0.8	2.0
Little Rock	46.0	4.1	21.0	Savannah		2.7	2.5
Los Angeles	43.4	10.3	2.1	Scranton	64.0	0.5	2.2
Louisville	57.0	0	3.5	Seattle	48.7	0.5	1.2
Manchester	63.6	10.2	0.8	Springfield, Ill.		0.2	1.9
Memphis	47.9	3.3	1.3	Washington, D. C.	60.7	5.1	1.2
Milwaukee	61.6	1.1	3.2				

<sup>1</sup> Increase.

<sup>2</sup> Decrease.

<sup>3</sup> Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of June 99.3 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 42 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Charleston, S. C., Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Providence, Richmond, Rochester, St. Louis, St. Paul, San Francisco, Scranton, Springfield, Ill., and Washington, D. C.

<sup>4</sup> The consumption figures used from January, 1913, to December, 1920, for each article in each city were given in the November, 1918, issue, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, were given in the March, 1921, issue, p. 26.

The following summary shows the promptness with which the merchants responded in June, 1927:

**RETAIL PRICE REPORTS RECEIVED FOR JUNE, 1927**

Item	United States	Geographic division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	99.3	99.7	99.4	99.4	99.4	98.0
Number of cities in each section from which every report was received.....	42	13	7	12	7	3

**Retail Prices of Coal in the United States<sup>5</sup>**

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, June 15, 1926, and May 15, and June 15, 1927, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

<sup>5</sup> Prices of coal were formerly secured semiannually and published in the March and September issues. Since June, 1920, these prices have been secured and published monthly.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JUNE 15, 1926, AND MAY 15 AND JUNE 15, 1927

City, and kind of coal	1913		1926		1927	
	Jan. 15	July 15	June 15	May 15	June 15	
<b>United States:</b>						
<b>Pennsylvania anthracite—</b>						
Stove—						
Average price.....	\$7.90	\$7.46	\$15.40	\$14.88	\$15.06	
Index (1913=100).....	103.4	96.6	199.3	192.6	194.9	
Chestnut—						
Average price.....	88.15	87.68	\$15.18	\$14.53	\$14.70	
Index (1913=100).....	103.0	97.0	191.8	183.6	185.7	
Bituminous—						
Average price.....	\$5.48	\$5.39	\$8.67	\$8.88	\$8.89	
Index (1913=100).....	100.8	99.2	159.5	163.4	163.6	
<b>Atlanta, Ga.:</b>						
Bituminous.....	\$5.88	\$4.83	\$7.37	\$7.35	\$7.37	
<b>Baltimore, Md.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	17.70	17.24	116.00	15.25	15.50	
Chestnut.....	17.93	17.49	115.50	14.50	14.75	
Bituminous.....			7.58	8.18	8.11	
<b>Birmingham, Ala.:</b>						
Bituminous.....	4.22	4.01	7.08	6.98	7.10	
<b>Boston, Mass.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	8.25	7.50	16.00	15.75	15.75	
Chestnut.....	8.25	7.75	15.75	15.50	15.50	
<b>Bridgeport, Conn.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....			15.00	14.50	14.50	
Chestnut.....			15.00	14.50	14.50	
<b>Buffalo, N. Y.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	6.75	6.54	13.75	13.44	13.79	
Chestnut.....	6.99	6.80	13.46	13.04	13.38	
<b>Butte, Mont.:</b>						
Bituminous.....			11.07	10.95	10.95	
<b>Charleston, S. C.:</b>						
Bituminous.....	16.75	16.75	11.00	11.00	11.00	
<b>Chicago, Ill.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	8.00	7.80	16.84	16.25	16.50	
Chestnut.....	8.25	8.05	16.63	15.75	16.00	
Bituminous.....	4.97	4.65	8.13	8.98	9.12	
<b>Cincinnati, Ohio:</b>						
Bituminous.....						
<b>Cleveland, Ohio:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	7.50	7.25	14.75	15.00	15.05	
Chestnut.....	7.75	7.50	14.75	14.50	14.55	
Bituminous.....	4.14	4.14	8.56	8.77	8.94	
<b>Columbus, Ohio:</b>						
Bituminous.....			6.58	6.93	7.00	
<b>Dallas, Tex.:</b>						
<b>Arkansas anthracite—</b>						
Egg.....			14.50	14.67	14.50	
Bituminous.....	8.25	7.21	12.22	12.50	11.71	
<b>Denver, Colo.:</b>						
<b>Colorado anthracite—</b>						
Furnace, 1 and 2 mixed.....	8.88	9.00	15.60	15.60	15.75	
Stove, 3 and 5 mixed.....	8.50	8.50	15.60	15.80	15.75	
Bituminous.....	5.25	4.88	9.41	9.14	9.32	
<b>Detroit, Mich.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	8.00	7.45	16.00	15.00	15.00	
Chestnut.....	8.25	7.65	15.50	14.50	14.50	
Bituminous.....	5.20	5.20	9.24	9.41	9.28	
<b>Fall River, Mass.:</b>						
<b>Pennsylvania anthracite—</b>						
Stove.....	8.25	7.43	16.75	16.25	16.25	
Chestnut.....	8.25	7.61	16.25	15.75	15.75	
<b>Houston, Tex.:</b>						
Bituminous.....			11.00	11.40	11.60	
<b>Indianapolis, Ind.:</b>						
Bituminous.....	3.81	3.70	6.72	6.93	6.96	
<b>Jacksonville, Fla.:</b>						
Bituminous.....	7.50	7.00	12.50	12.00	12.00	

<sup>1</sup> Per ton of 2,240 pounds.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JUNE 15, 1926, AND MAY 15 AND JUNE 15, 1927—Continued

City, and kind of coal	1913		1926		1927	
	Jan. 15	July 15	June 15	May 15	June 15	
Kansas City, Mo.: Arkansas anthracite—						
Furnace			\$13.50	\$12.90	\$12.90	
Stove No. 4			15.33	14.67	14.67	
Bituminous	\$4.39	\$3.94	7.48	7.65	7.65	
Little Rock, Ark.: Arkansas anthracite—						
Egg				14.00	14.00	
Bituminous	6.00	5.33	9.85	10.68	10.50	
Los Angeles, Calif.: Bituminous	13.52	12.50	15.31	16.50	15.25	
Louisville, Ky.: Bituminous	4.20	4.00	6.31	6.11	6.58	
Manchester, N. H.: Pennsylvania anthracite—						
Stove	10.00	8.50	17.00	16.50	17.08	
Chestnut	10.00	8.50	17.00	16.25	16.83	
Memphis, Tenn.: Bituminous	\$4.34	\$4.22	6.75	8.75	8.75	
Milwaukee, Wis.: Pennsylvania anthracite—						
Stove	8.00	7.85	16.80	16.15	16.40	
Chestnut	8.25	8.10	16.65	15.70	15.95	
Bituminous	6.25	5.71	8.90	8.97	9.32	
Minneapolis, Minn.: Pennsylvania anthracite—						
Stove	9.25	9.05	18.10	17.65	17.91	
Chestnut	9.50	9.30	17.95	17.20	17.45	
Bituminous	5.89	5.79	11.02	11.08	11.06	
Mobile, Ala.: Bituminous				9.37	9.35	9.35
Newark, N. J.: Pennsylvania anthracite—						
Stove	6.50	6.25	14.00	13.45	13.80	
Chestnut	6.75	6.50	13.50	13.00	13.25	
New Haven, Conn.: Pennsylvania anthracite—						
Stove	7.50	6.25	15.05	14.65	14.55	
Chestnut	7.50	6.25	15.05	14.65	14.55	
New Orleans, La.: Bituminous	\$6.06	\$6.06	9.46	9.32	9.32	
New York, N. Y.: Pennsylvania anthracite—						
Stove	7.07	6.66	14.75	13.83	14.08	
Chestnut	7.14	6.80	14.50	13.54	13.79	
Norfolk, Va.: Pennsylvania anthracite—						
Stove			15.50	14.00	14.50	
Chestnut			15.50	14.00	14.50	
Bituminous			8.41	8.27	8.57	
Omaha, Nebr.: Bituminous						
Peoria, Ill.: Bituminous	6.63	6.13	9.42	9.66	9.68	
Philadelphia, Pa.: Pennsylvania anthracite—				6.96	7.04	6.99
Stove	17.16	16.80	15.79	14.75	14.80	
Chestnut	17.38	17.14	15.84	14.25	14.30	
Pittsburgh, Pa.: Pennsylvania anthracite—						
Chestnut	18.00	17.44	15.13	15.00	14.88	
Bituminous	13.16	13.18	5.63	6.17	5.85	
Portland, Me.: Pennsylvania anthracite—						
Stove			16.56	16.33	16.32	
Chestnut			16.56	16.33	16.32	
Portland, Oreg.: Bituminous			11.74	12.58	12.61	

<sup>1</sup> Per ton of 2,240 pounds.

<sup>2</sup> Per 10-barrel lot (1,800 pounds).

<sup>3</sup> Per 25-bushel lot (1,000 pounds).

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JUNE 15, 1926, AND MAY 15 AND JUNE 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	June 15	May 15	June 15
Providence, R. I.: Pennsylvania anthracite—					
Stove.....	\$8.25	\$7.50	\$16.25	\$15.75	\$15.75
Chestnut.....	8.25	7.75	16.00	15.50	15.50
Richmond, Va.: Pennsylvania anthracite—					
Stove.....	8.00	7.25	15.33	15.00	15.00
Chestnut.....	8.00	7.25	15.50	15.00	15.00
Bituminous.....	5.50	4.94	8.66	9.17	9.21
Rochester, N. Y.: Pennsylvania anthracite—					
Stove.....			14.60	14.10	14.35
Chestnut.....			14.15	13.65	13.90
St. Louis, Mo.: Pennsylvania anthracite—					
Stove.....	8.44	7.74	16.73	16.50	16.65
Chestnut.....	8.08	7.90	16.45	16.05	16.20
Bituminous.....	3.36	3.04	5.87	7.19	7.12
St. Paul, Minn.: Pennsylvania anthracite—					
Stove.....	9.20	9.05	18.10	17.65	17.90
Chestnut.....	9.45	9.30	17.95	17.20	17.45
Bituminous.....	6.07	6.04	11.26	11.31	11.23
Salt Lake City, Utah: Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11.00	11.50	18.00	18.00	18.00
Stove, 3 and 5 mixed.....	11.00	11.50	18.00	18.00	18.00
Bituminous.....	5.64	5.46	6.62	8.19	7.27
San Francisco, Calif.: New Mexico anthracite—					
Cerillos egg.....	17.00	17.00	25.00	25.00	25.00
Colorado anthracite—					
Egg.....	17.00	17.00	24.50	24.50	24.50
Bituminous.....	12.00	12.00	16.22	15.60	15.60
Savannah, Ga.: Bituminous.....			10.88	10.63	10.63
Scranton, Pa.: Pennsylvania anthracite—					
Stove.....	4.25	4.31	10.92	10.28	10.47
Chestnut.....	4.50	4.56	10.67	10.03	10.22
Seattle, Wash.: Bituminous.....	7.63	7.70	8.51	10.35	10.14
Springfield, Ill.: Bituminous.....			4.35	4.44	4.44
Washington, D. C.: Pennsylvania anthracite—					
Stove.....	17.50	17.38	15.53	14.99	15.25
Chestnut.....	17.65	17.53	15.22	14.48	14.73
Bituminous—					
Prepared sizes, low volatile.....			10.67	10.33	10.67
Prepared sizes, high volatile.....			10.00	9.00	8.75
Run of mine, mixed.....			7.75	7.78	7.78

<sup>1</sup> Per ton of 2,240 pounds.

<sup>2</sup> 50 cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

<sup>3</sup> All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

The following table shows for the United States both average and relative retail prices of Pennsylvania white ash anthracite coal, stove and chestnut sizes, and of bituminous coal in January and July, 1913 to 1925, and for each month of 1926 and 1927 through June. An average price for the year 1913 has been made from the averages for January and July of that year. The average price for each month has been divided by this average price for the year 1913 to obtain the relative price.

TABLE 2.—AVERAGE AND RELATIVE PRICES OF COAL FOR THE UNITED STATES  
ON SPECIFIED DATES FROM JANUARY, 1913, TO JUNE, 1927

Year and month	Pennsylvania anthracite, white ash				Bituminous	
	Stove		Chestnut		Average price	Relative price
	Average price	Relative price	Average price	Relative price		
1913—						
Average for year.....	\$7.73	100.0	\$7.91	100.0	\$5.43	100.0
January.....	7.99	103.4	8.15	103.0	5.48	100.8
July.....	7.46	96.6	7.68	97.0	5.39	90.2
1914—						
January.....	7.80	100.9	8.00	101.0	5.97	109.9
July.....	7.90	98.3	7.78	98.3	5.46	100.6
1915—						
January.....	7.83	101.4	7.99	101.0	5.71	105.2
July.....	7.54	97.6	7.73	97.7	5.44	100.1
1916—						
January.....	7.93	102.7	8.13	102.7	5.69	104.8
July.....	8.12	106.2	8.28	104.6	5.52	101.6
1917—						
January.....	9.29	120.2	9.40	118.8	6.96	128.1
July.....	9.08	117.5	9.16	115.7	7.21	132.7
1918—						
January.....	9.88	127.9	10.03	126.7	7.68	141.3
July.....	9.96	128.9	10.07	127.3	7.92	145.8
1919—						
January.....	11.51	149.0	11.61	146.7	7.90	145.3
July.....	12.14	157.2	12.17	153.8	8.10	149.1
1920—						
January.....	12.59	162.9	12.77	161.3	8.81	162.1
July.....	14.28	184.9	14.33	181.1	10.55	194.1
1921—						
January.....	15.99	207.0	16.13	203.8	11.82	217.6
July.....	14.90	192.8	14.95	188.9	10.47	192.7
1922—						
January.....	14.98	193.9	15.02	189.8	9.89	182.0
July.....	14.87	192.4	14.92	188.5	9.49	174.6
1923—						
January.....	15.43	199.7	15.46	195.3	11.18	205.7
July.....	15.10	195.5	15.05	190.1	10.04	184.7
1924—						
January.....	15.77	204.1	15.76	199.1	9.75	179.5
July.....	15.24	197.2	15.10	190.7	8.94	164.5
1925—						
January.....	15.45	200.0	15.37	194.2	9.24	170.0
July.....	15.14	196.0	14.93	188.6	8.61	158.5
1926—						
January.....	(1)	(1)	(1)	(1)	9.74	179.3
February.....	(1)	(1)	(1)	(1)	9.72	178.8
March.....	16.12	208.6	15.91	201.1	9.25	170.2
April.....	15.54	201.2	15.37	194.2	9.11	167.6
May.....	15.41	199.5	15.18	191.8	8.76	161.2
June.....	15.40	199.3	15.18	191.8	8.67	159.5
July.....	15.43	199.7	15.19	191.9	8.70	160.1
August.....	15.49	200.4	15.23	192.5	8.81	162.1
September.....	15.55	201.3	15.30	193.4	9.25	170.3
October.....	15.56	201.4	15.31	193.5	9.59	176.5
November.....	15.64	202.4	15.41	194.7	10.24	188.4
December.....	15.66	202.7	15.44	195.0	10.15	186.8
1927—						
January.....	15.66	202.7	15.42	194.8	9.96	183.3
February.....	15.65	202.6	15.44	195.0	9.86	181.4
March.....	15.60	201.9	15.36	194.0	9.74	179.3
April.....	14.94	193.4	14.61	184.6	8.95	164.7
May.....	14.88	192.6	14.53	183.6	8.88	163.4
June.....	15.06	194.9	14.70	185.7	8.89	163.6

<sup>1</sup> Insufficient data.

### Retail Prices of Gas in the United States

THE net price per 1,000 cubic feet of gas for household use in each of 51 cities is shown in the following table. In this table the average family consumption of manufactured gas is assumed to be 3,000 cubic feet per month. In cities where a service charge or a sliding scale is in operation, families using less than 3,000 cubic feet per month pay a somewhat higher rate than here shown, while those consuming more than this amount pay a lower rate. The figures here given are believed to represent quite closely the actual monthly cost of gas per 1,000 cubic feet to the average wage earner's family. Prices for natural gas have been quoted for those cities where it is in general use. These prices are based on an estimated average family consumption of 5,000 cubic feet per month. For Buffalo and Los Angeles prices are given for natural and manufactured gas mixed.

TABLE 1.—NET PRICE PER 1,000 CUBIC FEET OF GAS BASED ON A FAMILY CONSUMPTION OF 3,000 CUBIC FEET, IN SPECIFIED MONTHS FROM APRIL, 1913, TO JUNE, 1927, BY CITIES

#### Manufactured gas

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Mar. 15, 1923	June 15, 1924	June 15, 1925	June 15, 1926	Dec. 15, 1926	June 15, 1927
Atlanta	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.15	\$1.15	\$1.90	\$1.65	\$1.65	\$1.55	\$1.55	\$1.55	\$1.55	\$1.55
Baltimore	.90	.80	.80	.75	.75	.75	.75	.75	.75	.92	.92	.85	.85	.85	.85	.85
Birmingham	1.00	.95	.95	.95	.95	.95	.95	.95	.88	.88	.88	.80	.80	.80	.80	.80
Boston	.81	.81	.80	.80	.86	1.05	1.08	1.40	1.34	1.25	1.20	1.18	1.18	1.18	1.18	1.18
Bridgeport	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.47	1.60	1.50	1.45	1.45	1.45	1.45	1.45	1.45
Buffalo	1.00	1.00	1.00	1.00	1.00	1.00	1.45	1.45	1.45	1.45	1.45	2.10	2.10	2.10	2.10	2.10
Butte	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Charleston	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Chicago	.80	.80	.80	.80	.80	.72	.90	.87	1.20	1.07	1.07	1.02	1.02	1.02	1.02	1.02
Cleveland	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	1.25	1.25	1.25	1.25	1.25
Denver	.85	.80	.80	.80	.80	.85	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Detroit	.75	.75	.75	.75	.75	.75	.79	.79	.85	.79	.79	.82	.82	.79	.79	.79
Fall River	.80	.80	.80	.80	.80	.95	.95	1.05	1.25	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Houston	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.05	1.05	1.05	1.05
Indianapolis	.60	.55	.55	.55	.55	.60	.60	.90	.90	1.20	1.15	1.10	1.05	1.05	1.05	1.05
Jacksonville	1.20	1.20	1.15	1.15	1.15	1.25	1.25	1.50	1.75	1.75	1.65	1.97	1.97	1.92	1.92	1.92
Manchester	1.10	1.10	1.00	1.00	1.00	1.00	1.18	1.18	1.58	1.48	1.48	1.38	1.38	1.38	1.38	1.38
Memphis	1.00	1.00	1.00	1.00	.93	.93	.93	1.27	1.35	1.35	1.20	1.20	1.20	1.20	1.20	1.20
Milwaukee	.75	.75	.75	.75	.75	.75	.75	.75	.90	.90	.86	.82	.82	.82	.82	.82
Minneapolis	.85	.80	.80	.77	.77	.77	.95	.95	1.28	1.02	1.03	1.01	.95	.97	.95	.96
Mobile	1.10	1.10	1.10	1.10	1.10	1.35	1.35	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.76	1.76
Newark	1.00	.90	.90	.90	.90	.97	.97	1.15	1.40	1.40	1.25	1.20	1.20	1.20	1.20	1.20
New Haven	.90	.90	.90	.90	1.00	1.10	1.10	1.27	1.27	1.18	1.18	1.13	1.13	1.13	1.13	1.13
New Orleans	1.10	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.45	1.30	1.30	1.30	1.30	1.30	1.30	1.30
New York	.84	.84	.83	.83	.83	.83	.85	.87	1.40	1.32	1.23	1.23	1.23	1.23	1.23	1.24
Norfolk	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.40	1.45	1.40	1.40	1.33	1.33	1.33	1.33
Omaha	1.15	1.15	1.15	1.00	1.00	1.15	1.15	1.15	1.47	1.27	1.18	1.18	1.08	1.08	1.08	1.08
Peoria	.90	.90	.90	.90	.85	.85	.85	.85	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Philadelphia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pittsburgh	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Portland, Me.	1.10	1.00	1.00	1.00	1.00	1.40	1.40	1.80	1.85	1.75	1.55	1.55	1.55	1.50	1.42	1.42
Portland, Oreg.	.95	.95	.95	.95	.95	.95	.95	.95	1.38	1.25	1.16	1.16	1.16	1.19	1.19	1.17
Providence	.85	.85	.85	.85	.85	.85	1.00	1.30	1.30	1.42	1.42	1.27	1.22	1.17	1.13	1.13
Richmond	.90	.90	.90	.90	.80	.80	.80	1.00	1.00	1.30	1.30	1.30	1.30	1.29	1.29	1.29
Rochester	.95	.95	.95	.95	.95	.95	.95	.95	1.18	1.10	1.05	1.00	1.00	1.00	1.00	1.00
St. Louis	.80	.80	.80	.80	.75	.75	.75	.85	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
St. Paul	.95	.90	.90	.85	.85	.85	.85	.85	1.00	1.00	.85	.85	.90	.90	.90	.90
Salt Lake City	.87	.87	.87	.87	.87	.87	.87	1.15	1.35	1.57	1.57	1.54	1.53	1.52	1.52	1.52
San Francisco	.75	.85	.85	.86	.85	.85	.95	.95	1.05	1.04	.92	1.00	1.05	.96	.96	.96
Savannah									1.25	1.60	1.60	1.45	1.45	1.45	1.45	1.45
Scranton	.95	.95	.95	.95	.95	1.15	1.30	1.30	1.70	1.70	1.60	1.50	1.50	1.40	1.40	1.40
Seattle	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Springfield, Ill.	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.40	1.40	1.35	1.35	1.25	1.25	1.25	1.25
Washington, D.C.	.93	.93	.93	.93	.80	.90	.95	.95	1.25	1.10	1.05	1.00	1.00	1.00	1.00	1.00

TABLE 1.—NET PRICE PER 1,000 CUBIC FEET OF GAS BASED ON A FAMILY CONSUMPTION OF 3,000 CUBIC FEET, IN SPECIFIED MONTHS FROM APRIL, 1913, TO JUNE, 1927, BY CITIES—Continued

*Natural gas*

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Mar. 15, 1923	June 15, 1924	June 15, 1925	June 15, 1926	Dec. June 15, 1926
Buffalo	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.35	\$0.35	\$0.35	\$0.42					
Cincinnati	.30	.30	.30	.30	.35	.35	.35	.35	.50	\$0.50	\$0.50	\$0.75	\$0.75	\$0.75	\$0.75
Cleveland	.30	.30	.30	.30	.30	.30	.35	.35	.40	.40	.55	.55	.60	.60	.60
Columbus	.30	.30	.30	.30	.30	.30	.30	.30	.30	.45	.45	.45	.55	.55	.48
Dallas	.45	.45	.45	.45	.45	.45	.45	.45	.68	.68	.68	.74	.74	.74	.70
Houston															.75
Kansas City, Mo.	.27	.27	.27	.27	.30	.60	.80	.80	.90	.95	.95	.95	.95	.95	.75
Little Rock	.40	.40	.40	.40	.40	.40	.45	.45	.45	.45	.45	.65	.65	.65	.65
Los Angeles															.91
Louisville		.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
Pittsburgh	.28	.28	.28	.28	.28	.28	.35	.35	.45	.50	.50	.58	.60	.60	.60

*Manufactured and natural gas mixed*

Buffalo													\$0.62	\$0.60	\$0.60	\$0.65	\$0.65	\$0.65
Los Angeles													.68	.68	.68	.68	.68	.68

From the prices quoted on manufactured gas, average prices have been computed for all of the cities combined and are shown in the next table for April 15 of each year from 1913 to 1920, and for May 15, September 15, and December 15, 1921; March 15, June 15, September 15, and December 15, 1922, 1923, and 1924; June 15 and December 15, 1925 and 1926; and June 15, 1927. These prices are based on an estimated average family consumption of 3,000 cubic feet.

Relative prices have been computed by dividing the price of each year by the price in April, 1913.

The price of manufactured gas in June, 1927, showed an increase of 28.4 per cent since April, 1913. From December, 1926, to June, 1927, there was no change in the price of gas.

TABLE 2.—AVERAGE AND RELATIVE NET PRICE PER 1,000 CUBIC FEET OF MANUFACTURED GAS, BASED ON A FAMILY CONSUMPTION OF 3,000 CUBIC FEET IN SPECIFIED MONTHS OF EACH YEAR, 1913 TO 1927

Date	Average net price	Relative price	Date	Average net price	Relative price
Apr. 15, 1913	\$0.95	100.0	Dec. 15, 1922		
Apr. 15, 1914	.94	98.9	Mar. 15, 1923		
Apr. 15, 1915	.93	97.9	June 15, 1923		
Apr. 15, 1916	.92	96.8	Sept. 15, 1923		
Apr. 15, 1917	.91	95.8	Dec. 15, 1923		
Apr. 15, 1918	.95	100.0	Mar. 15, 1924		
Apr. 15, 1919	1.04	109.5	June 15, 1924		
Apr. 15, 1920	1.09	114.7	Sept. 15, 1924		
May 15, 1921	1.32	138.9	Dec. 15, 1924		
Sept. 15, 1921	1.31	137.9	June 15, 1925		
Dec. 15, 1921	1.30	136.8	Dec. 15, 1925		
Mar. 15, 1922	1.29	135.8	June 15, 1926		
June 15, 1922	1.27	133.7	Dec. 15, 1926		
Sept. 15, 1922	1.26	132.6	June 15, 1927		

**Retail Prices of Electricity in the United States****Explanation of Prices**

THE following table shows for 51 cities the net rates per kilowatt-hour of electricity used for household purposes for specified months, in 1913, 1925, 1926, and 1927. For the cities having more than one tariff for domestic consumers the rates are shown for the schedule under which most of the residences are served.

Several cities have sliding scales based on a variable number of kilowatt-hours payable at each rate. The number of kilowatt-hours payable at each rate in these cities is determined for each customer according to the watts of installation, either in whole or in part, in the individual home. The number of watts so determined is called the customer's "demand."

In Baltimore the demand is the maximum normal rate of use of electricity in any half-hour period of time. It may be estimated or determined by the company from time to time according to the customer's normal use of electricity and may equal the total installation reduced to kilowatts.

In Buffalo the demand consists of two parts—lighting, 25 per cent of the total installation, but never less than 250 watts; and power,  $\frac{1}{2}$  per cent of the capacity of any electric range, water heater, or other appliance of 1,000 watts or over and 25 per cent of the rated capacity of motors exceeding one-half horsepower but less than 1 horsepower. The installation is determined by inspection of premises.

In Chicago the equivalent in kilowatt-hours to 30 hours' use of demand has been estimated as follows: For a rated capacity of 475 to 574 watts, 11 kilowatt-hours; 575 to 674 watts, 12 kilowatt-hours; 675 to 774 watts, 13 kilowatt-hours; and 775 to 874 watts, 14 kilowatt-hours. Although the equivalent in kilowatt-hours to 30 hours' use of demand of from 1 to 1,500 watts is given on the printed tariff, the equivalent is here shown only for installations of from 475 to 874 watts, the connected load of the average workingman's home being as a rule within this range.

In Cincinnati the demand has been estimated as being 70 per cent of the connected load, excluding appliances.

In Cleveland, in December, 1913, Company A determined the demand by inspection as being 40 per cent of the connected load. From December, 1919, to the present time there has been a flat rate for all current consumed.

In Houston the demand is estimated as 50 per cent of the connected load, each socket opening being rated at 50 watts.

In New York the demand for Company C, when not determined by meter, has been computed at 50 per cent of total installation in residences, each standard socket being rated at 50 watts and all other outlets being rated at their actual kilowatt capacity.

In Pittsburgh since December, 1919, the demand has been determined by inspection, the first 10 outlets being rated at 30 watts each, the next 20 outlets at 20 watts each, and each additional outlet at 10 watts. Household utensils and appliances of not over 660 watts each have been excluded.

In Portland, Oreg., the demand for Company A has been estimated as one-third of the connected lighting load. Ranges, heating devices, and small power up to a rated capacity of 2 kilowatts are not included.

For Company B the demand, when not based on actual measurement, has been estimated at one-third of the connected load, no demand being established at less than 233 watts.

In Springfield, Ill., the demand for Company A in December, 1913, was the active load predetermined as follows: 80 per cent of the first 500 watts of connected load plus 60 per cent of that part of the connected load in excess of the first 500 watts—minimum active load, 150 watts.

In Washington, D. C., the demand is determined by inspection and consists of 100 per cent of the connected load, excluding small fans and heating and cooking appliances when not permanently connected.

NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN DECEMBER, 1913, JUNE AND DECEMBER, 1925, AND 1926, AND JUNE, 1927, FOR 51 CITIES

City	Measure of consumption, per month	De-cem-ber, 1913		De-cem-ber, 1925		June, 1926		De-cem-ber, 1926		June, 1927	
		Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Atlanta	First 100 kilowatt-hours	17.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Baltimore	First 20 hours' use of demand	8.5	4.8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0
Birmingham	Next kilowatt-hours up to 800			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Boston:	First 100 kilowatt-hours	8.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Company A	First 1,000 kilowatt-hours	10.0	9.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Company B	do	10.0	9.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Bridgeport	All current	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Buffalo	First 60 hours' use of demand	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Butte	Next 120 hours' use of demand	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Charleston	Excess	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Chicago	First 25 kilowatt-hours	9.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 25 kilowatt-hours			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	First 50 kilowatt-hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	Next 50 kilowatt-hours	8.0									
	First 30 hours' use of demand	10.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 30 hours' use of demand	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cincinnati	First 30 hours' use of demand	0.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	Next 30 hours' use of demand	0.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Excess	3.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cleveland:	First 500 kilowatt-hours	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Company A	Excess	5.0									
Company B	All current	8.0	11.3.0	11.3.0	11.3.0	11.3.0	11.3.0	11.3.0	11.3.0	11.3.0	11.3.0
Columbus	Next 600 kilowatt-hours	5.0									
Dallas	First 75 kilowatt-hours	7.0	6.7.0	6.7.0	6.7.0	6.7.0	6.7.0	6.7.0	6.7.0	6.7.0	6.7.0
Denver	First 800 kilowatt-hours	10.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	First 15 kilowatt-hours	8.0	6.8.0	6.8.0	6.8.0	6.8.0	6.8.0	6.8.0	6.8.0	6.8.0	6.8.0
	Next 30 kilowatt-hours										
	Excess										
Detroit	First 3 kilowatt-hours per active room	12.12.6	10.8	10.8	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Excess	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Fall River	First 25 kilowatt-hours	11.9.5	9.0	9.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Houston	Next 975 kilowatt-hours			8.5	8.5	7.5	7.5	7.5	7.5	7.5	7.5
	First 30 hours' use of demand	12.12.4	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	Excess	7.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Indianapolis:	First 50 kilowatt-hours	11.7.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Company A	Next 50 kilowatt-hours			11.6.3	11.6.3	11.6.3	11.6.3	11.6.3	11.6.3	11.6.3	11.6.3
Company B	First 50 kilowatt hours	11.7.0	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Jacksonville	Next 150 kilowatt-hours			6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
Kansas City	All current	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	First 5 kilowatt-hours per active room (minimum, 3 rooms)	11.9.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	Next 5 kilowatt-hours per room	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

For footnotes see end of table

## RETAIL PRICES OF ELECTRICITY

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NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN  
DECEMBER, 1913, JUNE AND DECEMBER, 1925 AND 1926, AND JUNE, 1927, FOR 51  
CITIES—Continued

City	Measure of consumption, per month	De-	June,	De-	June,	De-	June,
		cem- ber, 1913	1925	cem- ber, 1925	1926	cem- ber, 1926	1927
Little Rock	First 200 kilowatt-hours	6 13.5	10.0	10.0	10.0	10.0	10.0
Los Angeles	First 100 kilowatt-hours	5.5	5.6	5.6	5.6	5.6	5.6
Louisville	1 to 149 kilowatt-hours	7.6	7.6	7.6	7.6	7.6	7.6
Manchester	First 25 kilowatt-hours	6 11.4	12.0	12.0	12.0	12.0	12.0
	Next 50 kilowatt-hours		6.0	6.0	6.0	6.0	6.0
Memphis	First 6 kilowatt-hours per room	6 10.0	8.0	8.0	8.0	8.0	8.0
	Excess		5.0	5.0	5.0	5.0	5.0
Milwaukee	First 9 kilowatt-hours for each of the first 6 active rooms. <sup>30</sup>	18 11.4	19 7.6	19 7.6	19 7.6	6.7	6.7
	Additional energy up to 9 kilowatt-hours for each active room.	21 4.8	5.7	5.7	5.7	—	—
	Excess	3.8	3.1	3.1	3.1	2.9	2.9
Minneapolis	First 3 kilowatt-hours per active room	8.6	9.5	9.5	9.5	9.5	9.5
	Next 3 kilowatt-hours per active room	23 5.7	7.1	7.1	7.1	7.1	7.1
Mobile	First 50 kilowatt-hours	7.0	9.0	9.0	9.0	9.0	9.0
Newark	First 20 kilowatt-hours	23 10.0	9.0	9.0	9.0	9.0	9.0
	Next 30 kilowatt-hours	24 8.0	24 8.0	24 8.0	24 8.0	8.0	8.0
New Haven	All current	9.0	6.5	6.5	6.5	6.5	6.5
New Orleans	First 20 kilowatt-hours <sup>31</sup>	26 13.0	9.1	9.1	9.1	9.1	9.1
	Next 30 kilowatt-hours <sup>31</sup>	23 6.0	7.8	7.8	7.8	7.8	7.8
New York:	First 1,000 kilowatt-hours	27 10.0	28 7.3	28 7.2	28 7.2	28 7.2	28 7.3
Company A	All currents <sup>32</sup>	10.0	10.0	10.0	10.0	10.0	10.0
Company B	First 60 hours' use of demand	11.0	23 7.8	23 7.8	23 7.8	23 7.8	23 7.3
Company C <sup>33</sup>	First 100 kilowatt-hours	9.0	9.0	20 9.0	20 9.0	8.5	8.5
Norfolk	All current	26 11.4	5.5	5.5	5.5	5.5	5.5
Omaha	Next 125 kilowatt-hours	23 5.7	—	—	—	—	—
Peoria	First 5 kilowatt-hours for each of the first 2 rooms. <sup>34</sup>	23 9.9	9.0	9.0	9.0	9.0	9.0
	Second 5 kilowatt-hours for each of the first 2 rooms. <sup>31</sup>	—	6.0	6.0	6.0	6.0	6.0
Philadelphia:	First 12 kilowatt-hours	6 10.0	8.0	8.0	8.0	8.0	8.0
Company A	Next 36 kilowatt-hours	23 7.0	23 7.0	7.0	7.0	7.0	7.0
Company B	First 20 kilowatt-hours	23 10.0	9.0	9.0	9.0	9.0	9.0
Pittsburgh <sup>3</sup>	Next 30 kilowatt-hours	24 8.0	24 8.0	24 8.0	24 8.0	8.0	8.0
	First 30 hours' use of demand	6 10.0	8.0	8.0	8.0	8.0	8.0
	Next 60 hours' use of demand	—	5.5	5.5	5.5	5.5	5.5
Portland, Me.	All current	9.0	8.0	8.0	8.0	8.0	8.0
Portland, Oreg.:	Company A	First 9 kilowatt-hours	7.6	7.6	7.6	7.6	7.6
	Next kilowatt-hours <sup>34</sup>	25 6.7	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt-hours	26 5.7	2.9	2.9	2.9	2.9	2.9
	Company B	First 13 kilowatt-hours	27 9.0	7.3	7.3	7.3	7.3
	Next kilowatt-hours <sup>34</sup>	28 7.0	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt-hours	21 4.0	2.9	2.9	2.9	2.9	2.9
Providence	All current	10.0	40 6.9	40 6.8	40 6.8	40 6.9	40 6.8
Richmond	First 100 kilowatt-hours	9.0	9.0	9.0	20 9.0	20 9.0	8.5
Rochester	All current	8.0	8.0	8.0	8.0	8.0	8.0
St. Louis:	Company A	First 9 kilowatt-hours per active room	18 9.5	6.7	6.7	6.7	6.7
	Excess	5.7	2.4	2.4	2.4	2.4	2.4
Company B	First kilowatt-hours <sup>34</sup>	42 9.0	6.7	6.7	6.7	6.7	6.7
	Excess	5.7	2.4	2.4	2.4	2.4	2.4
St. Paul	First 3 kilowatt-hours per room	41 9.9	43 9.9	43 9.9	9.5	9.5	9.5
	Next 3 kilowatt-hours per room	—	—	—	7.1	7.1	7.1
	Excess	6.6	6.6	6.6	2.9	2.9	2.9
Salt Lake City	First 250 kilowatt-hours	9.0	8.1	8.1	8.1	8.1	8.1
San Francisco:	Company A	First 10 kilowatt-hours	7.0	9.0	9.0	9.0	9.0
	Next 40 kilowatt-hours	—	6.0	6.0	6.0	6.0	6.0
Company B	First 10 kilowatt-hours	7.0	9.0	9.0	9.0	9.0	9.0
	Next 40 kilowatt-hours	—	6.0	6.0	6.0	6.0	6.0
Savannah	First 100 kilowatt-hours	10 12.0	9.0	9.0	9.0	9.0	9.0
	Excess	6.0	—	—	—	—	—
Scranton	First 150 kilowatt-hours	6 9.0	10.0	10.0	10.0	10.0	10.0
Seattle:	Company A	First 40 kilowatt-hours	20 6.0	5.5	5.5	5.5	5.5
	Next 200 kilowatt-hours	22 4.0	2.0	2.0	2.0	2.0	2.0
Company B	First 40 kilowatt-hours	20 6.0	5.5	5.5	5.5	5.5	5.5
	Next 200 kilowatt-hours	22 4.0	2.0	2.0	2.0	2.0	2.0

For footnotes see end of table

NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN  
DECEMBER, 1913, JUNE AND DECEMBER, 1925 AND 1926, AND JUNE, 1927, FOR 51  
CITIES—Continued

City	Measure of consumption, per month	De-	June,	De-	June,	De-	June,
		cem- ber, 1913	cem- ber, 1925	cem- ber, 1925	cem- ber, 1926	cem- ber, 1926	cem- ber, 1927
Springfield:							
Company A	First 30 kilowatt-hours	10.0	6.0	6.0	6.0	6.0	6.0
	Next 70 kilowatt-hours	447.0	3.0	3.0	3.0	3.0	3.0
Company B	First 30 kilowatt-hours		6.0	6.0	6.0	6.0	6.0
	Next 70 kilowatt-hours		3.0	3.0	3.0	3.0	3.0
Washington, D. C. <sup>1</sup>	First 120 hours' use of demand	10.0	7.5	7.5	7.0	7.0	6.3

<sup>1</sup> First 150 kilowatt-hours.

<sup>2</sup> For determination of demand see explanation of prices.

<sup>3</sup> First 50 kilowatt-hours.

<sup>4</sup> First 40 kilowatt-hours.

<sup>5</sup> The gross rate is 10 cents per kilowatt-hour with discounts of 10 per cent for a monthly consumption of 1 to 25 kilowatt-hours and 15 per cent for a monthly consumption of 25 to 150 kilowatt-hours. The average family used 25 or more kilowatt-hours per month.

<sup>6</sup> All current.

<sup>7</sup> First 100 kilowatt-hours.

<sup>8</sup> First 25 kilowatt-hours.

<sup>9</sup> First 30 hours' use of demand. For determination of demand see explanation of prices.

<sup>10</sup> First 10 kilowatt-hours.

<sup>11</sup> Service charge 30 cents per month additional.

<sup>12</sup> First 2 kilowatt-hours per active room.

<sup>13</sup> First 200 kilowatt-hours.

<sup>14</sup> First 2 kilowatt-hours per 16 candlepower of installation.

<sup>15</sup> All current. This rate applies to a 5-year contract with a minimum charge of \$1 per month. For a 1-year contract the rates per kilowatt-hour are 10 cents without a minimum charge, or 9½ cents with a minimum of \$1 per month.

<sup>16</sup> Next 150 kilowatt hours.

<sup>17</sup> First 3 kilowatt-hours per active room; minimum, 3 rooms.

<sup>18</sup> First 4 kilowatt-hours for each of the first 4 active rooms and the first 2½ kilowatt-hours for each additional active room.

<sup>19</sup> First 5 kilowatt-hours for each of the first 5 active rooms and the first 2½ kilowatt-hours for each additional active room.

<sup>20</sup> And the first 7 kilowatt-hours per month for each active room in addition to the first 6.

<sup>21</sup> Additional energy up to 100 kilowatt-hours.

<sup>22</sup> Excess.

<sup>23</sup> First 500 kilowatt-hours.

<sup>24</sup> Next 480 kilowatt-hours.

<sup>25</sup> Surecharge, 25 cents per month additional.

<sup>26</sup> First 30 hours' use of connected load.

<sup>27</sup> First 250 kilowatt-hours.

<sup>28</sup> Price includes a coal charge.

<sup>29</sup> A discount of 5 per cent is allowed on all bills of \$2 or over when payment is made within 10 days from date of bill.

<sup>30</sup> First 60 kilowatt-hours.

<sup>31</sup> And 4 kilowatt-hours for each additional active room.

<sup>32</sup> 1 to 200 kilowatt-hours.

<sup>33</sup> Next 48 kilowatt-hours.

<sup>34</sup> The number of kilowatt-hours paid for at this rate is that in excess of the first 9 kilowatt-hours until 100 hours' use of the demand is reached. After 100 hours of demand have been consumed the lower rate can be applied. For determination of demand see explanation of prices.

<sup>35</sup> Next 70 kilowatt-hours.

<sup>36</sup> Next 100 kilowatt-hours.

<sup>37</sup> First 6 per cent of demand. For determination of demand see explanation of prices.

<sup>38</sup> Next 6 per cent of demand. For determination of demand see explanation of prices.

<sup>39</sup> For an installation of 600 watts or less 7 kilowatt-hours will apply. For each 30 watts of installation in excess of 600 watts 1 additional kilowatt-hour will apply.

<sup>40</sup> Service charge, 50 cents per month additional. Rate is 7 cents with reduction under a fuel clause.

<sup>41</sup> For a house of 4 rooms or less, 18 kilowatt-hours; for 5 or 6 rooms, 27 kilowatt-hours; and for 7 or 8 rooms, 36 kilowatt-hours.

<sup>42</sup> For a house of 6 rooms or less, 15 kilowatt-hours; for a house of 7 or 8 rooms, 20 kilowatt-hours.

<sup>43</sup> First 30 kilowatt-hours.

<sup>44</sup> First 30 hours' use of demand. For determination of demand see explanation of prices.

<sup>45</sup> Net 30 hours' use of demand. For determination of demand see explanation of prices.

### Index Numbers of Wholesale Prices in June, 1927

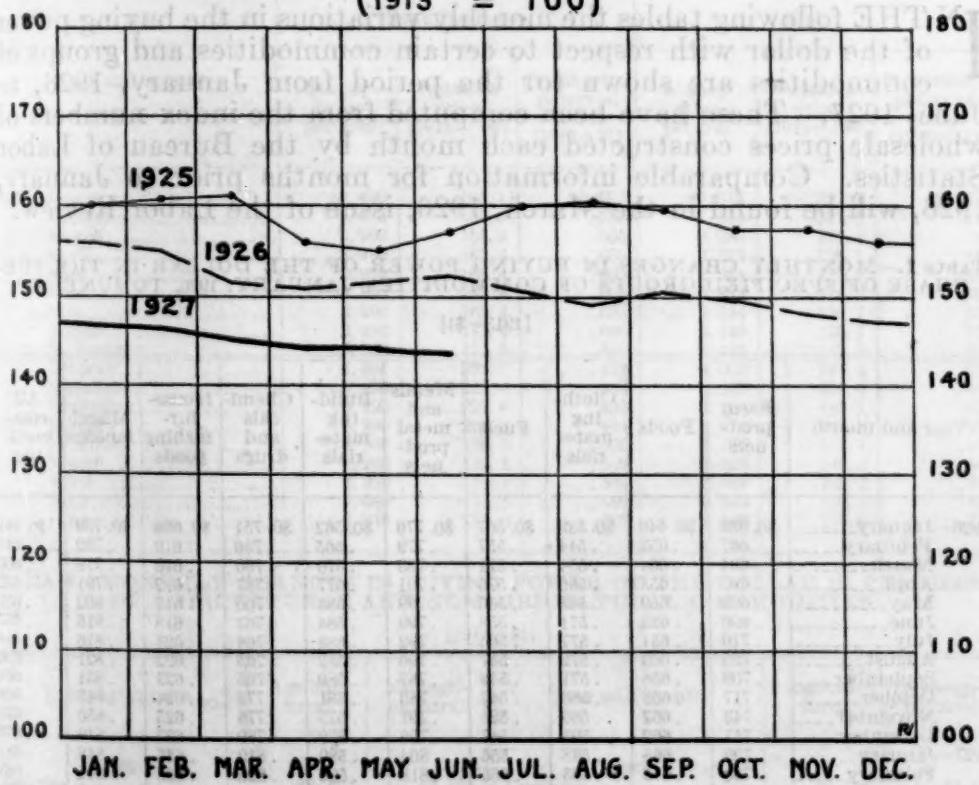
A SLIGHT decline in the general level of wholesale prices from May to June is shown by information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number registered 143.7 for June compared with 144.1 for May, a decline of one-fourth of 1 per cent. Compared with June, 1926, with an index number of 152.3, there was a decrease of nearly  $5\frac{3}{4}$  per cent.

Small decreases are shown for the groups of foods, metals, and building materials, with negligible decreases for chemicals and drugs and house-furnishing goods. Farm products, fuels, and miscellaneous commodities, on the other hand, increased slightly. No change in the price level was reported for clothing materials.

Of the 404 commodities or price series for which comparable information for May and June was collected increases were shown in 105 instances and decreases in 118 instances. In 181 instances no change in price was reported.

### TREND OF WHOLESALE PRICES.

(1913 = 100)



Comparing prices in June with those of a year ago, as measured by changes in the index numbers, it is seen that appreciable decreases took place in all groups of commodities, ranging from  $4\frac{1}{2}$  per cent in the case of metals to  $1\frac{1}{2}$  per cent in the case of fuels.

## INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS OF COMMODITIES

[1913=100.0]

Commodity group	June, 1926	1927	
		May	June
Farm products	143.7	137.4	138.2
Foods	156.6	148.0	144.4
Clothing materials	175.1	169.6	169.6
Fuels	179.2	158.2	158.7
Metals and metal products	125.1	120.6	119.6
Building materials	171.2	165.6	164.3
Chemicals and drugs	131.1	121.9	121.8
House-furnishing goods	161.7	157.4	157.3
Miscellaneous	122.5	120.2	120.5
All commodities	152.3	144.1	143.7
Raw materials <sup>1</sup>	133.7	146.3	146.7
Producers' goods <sup>1</sup>	127.5	120.5	119.9
Consumers' goods <sup>1</sup>	165.2	155.4	154.3

<sup>1</sup> Federal Reserve Board grouping.

## PURCHASING POWER OF THE DOLLAR (Wholesale Prices), January, 1926, to June, 1927

**I**N THE following tables the monthly variations in the buying power of the dollar with respect to certain commodities and groups of commodities are shown for the period from January, 1926, to June, 1927. These have been computed from the index numbers of wholesale prices constructed each month by the Bureau of Labor Statistics. Comparable information for months prior to January, 1926, will be found in the March, 1926, issue of the Labor Review.

TABLE 1.—MONTHLY CHANGES IN BUYING POWER OF THE DOLLAR IN THE PURCHASE OF SPECIFIED GROUPS OF COMMODITIES, JANUARY, 1926, TO JUNE, 1927

[1913=\$1]

Year and month	Farm products	Foods	Clothing materials	Fuels	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1926—January	\$0.659	\$0.640	\$0.539	\$0.567	\$0.776	\$0.562	\$0.751	\$0.606	\$0.739	\$0.641
February	.667	.653	.544	.557	.779	.565	.756	.610	.752	.645
March	.694	.661	.554	.571	.783	.570	.760	.610	.779	.660
April	.690	.653	.566	.575	.791	.577	.767	.612	.791	.662
May	.693	.650	.568	.560	.790	.583	.765	.617	.802	.659
June	.696	.639	.571	.558	.790	.584	.763	.618	.816	.657
July	.710	.651	.577	.565	.702	.583	.764	.621	.816	.664
August	.725	.663	.572	.557	.790	.582	.765	.622	.821	.670
September	.709	.658	.571	.549	.787	.580	.765	.623	.831	.664
October	.717	.658	.583	.542	.789	.581	.773	.624	.843	.668
November	.743	.662	.589	.526	.791	.575	.778	.625	.850	.675
December	.741	.662	.593	.547	.706	.579	.780	.627	.849	.679
1927—January	.729	.668	.598	.556	.804	.589	.819	.635	.848	.681
February	.730	.675	.603	.565	.818	.596	.820	.635	.844	.683
March	.732	.680	.594	.594	.814	.600	.829	.635	.843	.688
April	.732	.679	.591	.623	.820	.606	.821	.635	.844	.693
May	.728	.676	.590	.632	.829	.604	.830	.635	.832	.694
June	.724	.693	.590	.630	.836	.600	.821	.636	.830	.696

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TABLE 2.—MONTHLY CHANGES IN BUYING POWER OF THE DOLLAR IN THE PURCHASE OF SPECIFIED CLASSES OF BUILDING MATERIALS

[1913 = \$1]

Year and month	Lumber	Brick, common	Structural steel	Other building materials	All building materials
1926—January	\$0.522	\$0.487	\$0.775	\$0.602	\$0.562
February	.523	.486	.775	.607	.565
March	.528	.486	.775	.614	.570
April	.537	.488	.775	.621	.577
May	.542	.488	.775	.628	.583
June	.545	.489	.816	.620	.584
July	.551	.489	.775	.612	.583
August	.553	.489	.775	.607	.582
September	.549	.488	.755	.611	.580
October	.550	.488	.755	.611	.581
November	.538	.489	.755	.614	.575
December	.542	.490	.755	.620	.579
1927—January	.551	.482	.755	.634	.589
February	.555	.481	.775	.644	.596
March	.559	.482	.795	.647	.600
April	.568	.483	.795	.651	.606
May	.564	.483	.795	.651	.604
June	.568	.484	.816	.656	.609

TABLE 3.—WHOLESALE PRICES OF BITUMINOUS COAL AND COKE AND PURCHASING POWER OF THE DOLLAR

Year and month	Bituminous coal			Coke		
	Money price per ton	Relative price (1913 = 100)	Purchasing power of dollar (1913 = \$1)	Money price per ton	Relative price (1913 = 100)	Purchasing power of dollar (1913 = \$1)
1926—January	\$4.490	186.1	\$0.537	\$7.313	299.7	\$0.334
February	4.490	186.1	.537	7.844	321.5	.311
March	3.990	165.4	.605	3.280	134.4	.744
April	3.990	165.4	.605	3.125	128.1	.781
May	3.990	165.4	.605	2.944	120.7	.829
June	3.990	165.4	.605	2.835	116.2	.861
July	3.990	165.4	.605	2.944	120.7	.829
August	3.990	165.4	.605	3.140	128.7	.777
September	4.240	175.8	.569	3.488	143.0	.699
October	4.890	202.7	.493	4.000	164.0	.610
November	5.400	227.6	.439	5.000	205.0	.488
December	5.490	227.6	.439	3.906	160.1	.625
1927—January	4.990	206.8	.484	3.875	158.8	.630
February	4.740	196.5	.509	3.700	151.7	.659
March	4.240	175.8	.569	3.650	149.6	.668
April	4.240	175.8	.569	3.494	143.2	.698
May	4.240	175.8	.569	2.940	120.5	.830
June	4.240	175.8	.569	3.169	129.9	.770

TABLE 4.—MONTHLY CHANGES IN BUYING POWER OF THE DOLLAR IN PURCHASE OF AGRICULTURAL AND NONAGRICULTURAL COMMODITIES

[1913 = \$1]

Year and month	Agricultural	Nonagricultural	Year and month	Agricultural	Nonagricultural
1926					
January	\$0.651	\$0.635	January	\$0.608	\$0.669
February	.659	.636	February	.696	.674
March	.678	.647	March	.696	.684
April	.672	.655	April	.698	.693
May	.670	.653	May	.696	.695
June	.663	.654	June	.701	.694
July	.675	.657			
August	.692	.653			
September	.683	.651			
October	.688	.653			
November	.708	.649			
December	.704	.661			
1927					

**Average Wholesale Prices of Commodities, April to June, 1927**

**I**N CONTINUATION of the plan of publishing each quarter in the Labor Review a detailed statement of wholesale price changes, there is presented herewith a list of the more important commodities included in the bureau's compilation, together with the latest record of price changes available at the time of its preparation. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100 are shown in addition to the money prices wherever such information can be supplied. Index numbers for the several groups and subgroups also are included in the table. To show more minutely the fluctuation in prices, all index numbers are here published to one decimal fraction. Figures are given for April, May, and June, 1927.

**WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927**

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>FARM PRODUCTS</b>						
<b>Grains.</b>						
Barley, malting, per bushel, Chicago	\$0.826	\$0.806	\$0.916	136.6	151.3	157.3
Corn, per bushel, Chicago—				132.1	143.3	146.5
Contract grades	.735	.874	1.003	117.6	139.8	160.4
No. 3, mixed	.695	.850	.980	112.9	138.1	159.2
Oats, contract grades, per bushel, Chicago	.477	.508	.503	126.9	135.0	133.7
Rye, No. 2, per bushel, Chicago	1.031	1.134	1.146	162.0	178.2	180.2
Wheat, per bushel—						
No. 1, northern spring, Chicago	1.344	1.480	1.512	147.2	162.0	165.6
No. 2, red winter, Chicago	1.336	1.443	1.448	135.4	146.3	146.8
No. 2, hard winter, Kansas City	1.307	1.428	1.487	149.1	162.9	169.6
No. 1, northern spring, Minneapolis	1.341	1.444	1.456	153.5	165.3	166.6
No. 1, hard winter, Portland, Oreg.	1.390	1.558	1.510	149.6	167.7	162.6
<b>Livestock and poultry.</b>						
Cattle, steers, per 100 pounds, Chicago—						
Choice to prime	13.304	12.945	13.181	150.0	145.0	147.6
Good to choice	12.281	11.440	11.831	144.4	134.5	139.1
Hogs, per 100 pounds, Chicago—						
Heavy	10.506	9.445	8.688	125.6	112.9	103.9
Light	11.131	9.990	9.075	131.7	118.2	107.3
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades	7.781	5.900	5.156	166.0	125.9	110.0
Lambs, western medium to good	15.813	14.850	13.250	202.9	190.5	170.0
Wethers, fed, good to choice	10.188	8.420	7.500	190.5	157.5	140.3
Poultry, live fowls, per pound—						
Chicago	.286	.238	.206	185.8	154.1	133.9
New York	.308	.268	.243	183.7	160.1	144.9
<b>Other farm products.</b>						
Beans, medium, choice, per 100 pounds, New York	5.313	5.725	6.400	129.6	135.8	138.7
Clover seed, contract grades, per 100 pounds, Chicago	36.070	34.830	34.615	133.2	143.5	160.4
Cotton, middling, per pound—						
New Orleans	.143	.157	.164	112.6	123.9	129.2
New York	.146	.163	.168	114.5	127.3	131.2
Cottonseed, per ton, average price at gin	25.800	26.050	26.270	118.4	119.6	120.6

## AVERAGE WHOLESALE PRICES OF COMMODITIES

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## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>FARM PRODUCTS—Continued</b>						
<b>Other farm products—Continued.</b>						
Eggs, fresh, per dozen—						
Firsts, western, Boston	\$0.248	\$0.237	\$0.228	98.6	94.2	90.7
First, Chicago	.232	.220	.219	102.7	97.3	96.9
Extra firsts, Cincinnati	.219	.197	.231	97.8	87.8	103.4
Candied, New Orleans	.204	.182	.173	87.0	77.7	73.6
Firsts, New York	.246	.234	.231	98.6	93.9	92.9
Extra firsts, western, Philadelphia	.263	.256	.250	99.8	97.2	94.8
Extra pullets, San Francisco	.198	.198	.200	73.7	73.7	74.7
Flaxseed, No. 1, per bushel, Minneapolis	2.213	2.310	2.233	164.1	171.2	165.5
Hay, per ton—						
Alfalfa, No. 1, Kansas City	19.750	18.563	15.750	139.2	130.8	111.0
Clover, mixed, No. 1, Cincinnati	19.500	20.400	18.125	125.1	130.9	116.3
Timothy, No. 1, Chicago	20.500	20.500	19.625	127.9	127.9	122.4
Hides and skins, per pound—						
Calfskins No. 1, country, Chicago	.160	.177	.201	84.8	93.8	106.6
Goatskins, Brazilian, New York	.740	.745	.753	104.1	104.7	105.8
Hides, heavy, country cows, No. 1, Chicago	.121	.128	.151	80.4	84.9	100.1
Hides, packers', heavy, native steers, Chicago	.152	.168	.195	82.6	91.4	106.0
Hides, packers', heavy, Texas steers, Chicago	.146	.161	.181	80.9	88.8	99.8
Hops, prime to choice per pound—						
New York State, New York	.575	.575	.550	215.9	215.9	206.5
Pacifics, Portland, Oreg	.240	.231	.223	139.6	134.4	129.4
Milk, fluid, per quart—						
Chicago	.064	.062	.062	150.5	144.6	144.6
New York	.076	.076	.076	170.7	170.7	170.7
San Francisco	.068	.068	.068	158.1	158.1	158.1
Onions, yellow, per 100 pounds, Chicago	4.156	5.163	5.078	264.3	328.3	323.1
Peanuts, No. 1, per pound, Norfolk, Va	.052	.052	.053	146.2	146.2	148.7
Potatoes—						
White, good to choice, per 100 pounds, Chicago	2.600	3.600	3.694	254.0	351.6	360.8
Sweet, No. 1, per five-eighths bushel, Philadelphia	.950	.988	(1)	196.8	204.6	-----
Rice, per pound, New Orleans—						
Blue Rose, head, clean	.043	.043	.044	(1)	(1)	(1)
Honduras, head, clean	.063	.063	.063	123.3	123.3	123.3
Tobacco, leaf, per 100 pounds—						
Burley, good, leaf, dark red, Louisville, Ky	21.000	18.000	16.875	159.1	136.3	127.8
Average warehouse sales, Kentucky	6.490	6.299	7.033	72.8	70.7	85.7
Wool, per pound, Boston—						
Ohio, grease basis—						
Fine clothing	.380	.370	.370	166.3	162.0	162.0
Fine delaine	.440	.440	.450	184.3	184.3	188.4
Half blood	.440	.430	.440	173.1	169.2	173.1
One-fourth and three-eighths grades	.430	.420	.430	170.6	166.6	170.6
South American, grease basis—						
Argentine crossbreds, straight, quarter blood	.288	.278	.280	84.7	81.6	82.4
Montevideo, 50s	.355	.355	.355	100.3	100.3	100.3
Territory, scoured—						
Fine and fine medium, staple	1.098	1.075	1.075	195.4	191.4	191.4
Half blood	1.010	.997	.988	196.4	193.9	192.1
<b>FOODS.</b>						
<b>Meats.</b>						
Beef, fresh, per pound—						
Carcass, good, native steers, Chicago	.170	.170	.170	131.3	131.3	131.3
Sides, native, New York	.171	.174	.164	136.8	139.0	130.8
Beef, salt, extra mess, per barrel (200 pounds), New York	20.000	18.800	18.500	105.7	99.3	97.8
Hams, smoked, per pound, Chicago	.268	.259	.246	160.9	155.5	148.2
Lamb, dressed, per pound, Chicago	.291	.293	.300	195.7	196.7	201.7
Mutton, dressed, per pound, New York	.170	.156	.144	165.9	152.2	140.3
Pork, fresh, per pound—						
Loins, Chicago	.249	.233	.220	167.6	156.5	148.0
Loins, western, New York	.239	.228	.205	156.9	149.4	134.6
Pork, cured—						
Mess, salt, per barrel (200 pounds), New York	36.750	34.800	33.250	163.5	154.9	148.0
Sides, rough, per pound, Chicago	.200	.193	.184	161.8	156.4	149.2
Sides, short, clear, per pound, Chicago	.206	.199	.186	161.9	156.0	146.2
Poultry, dressed, per pound—						
Hens, heavy, Chicago	(1)	(1)	.195	-----	134.9	-----
Fowls, 48-54 pounds to dozen, New York	.319	.300	.263	174.8	164.5	143.9
Veal, dressed, good, per pound, Chicago	.179	.171	.178	192.4	184.3	191.0

<sup>1</sup> No quotation.<sup>2</sup> No 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—(Contd.)

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>FOODS—Continued</b>						
<b>Butter, cheese, and milk</b>						
Butter, creamery, extra, per pound—						
Boston.....	\$0.508	\$0.434	\$0.423	160.0	136.8	133.4
Chicago.....	.495	.417	.403	159.5	134.2	129.9
Cincinnati <sup>1</sup> .....	.470	.396	.383	(?)	(?)	(?)
New Orleans.....	.540	.470	.453	160.7	139.8	134.6
New York.....	.509	.436	.425	157.8	135.1	131.7
Philadelphia.....	.506	.434	.434	155.3	133.1	133.1
St. Louis.....	.497	.435	.423	160.9	140.8	136.7
San Francisco.....	.423	.413	.418	133.2	130.1	131.8
Cheese, whole milk, per pound—						
American, twins, Chicago.....	.228	.225	.226	160.4	158.7	150.6
State, fresh, flats, colored, average, New York.....	.223	.225	.218	144.4	145.7	141.7
California, flats, fancy, San Francisco.....	.229	.203	.200	143.5	127.0	125.5
Milk, fluid. (See Farm products.)						
Milk, condensed, per case of 48 14-ounce tins, New York.....	5.838	5.925	5.900	124.2	126.1	125.5
Milk, evaporated, per case of 48 16-ounce tins, New York.....	4.575	4.630	4.600	120.4	131.0	130.1
<b>Other foods</b>						
Beans, medium choice. (See Farm products.)						
Bread, per pound, before baking—						
Chicago.....	.075	.075	.075	174.5	174.5	174.5
Cincinnati.....	.071	.070	.071	199.7	196.9	199.7
New Orleans.....	.066	.066	.066	215.1	215.1	215.1
New York.....	.070	.070	.070	165.1	165.1	165.1
San Francisco.....	.069	.069	.069	173.0	173.0	173.0
Cocoa beans, per pound, New York.....	.206	.197	.204	134.3	128.9	133.3
Coffee, per pound, New York—						
Rio, No. 7.....	.162	.154	.148	145.2	138.4	133.3
Santos, No. 4.....	.179	.172	.169	136.4	130.4	128.6
Copra, South Sea, sun-dried, per pound, New York.....	.051	.051	.052	49.2	49.2	49.5
Eggs, fresh, per dozen. (See Farm products.)						
Fish—						
Cod, large, shore, pickled, cured, per 100 pounds,						
Gloucester, Mass.....	6.500	6.250	6.500	96.9	93.2	96.9
Mackerel, salt, large, 3s, per barrel, Boston.....	14.850	11.880	11.880	133.8	107.1	107.1
Salmon, canned, Alaska, red, per dozen, factory.....	2.675	2.675	2.675	183.2	183.2	183.2
Flour, rye, white, per barrel, Minneapolis.....	5.706	6.340	6.238	182.7	203.0	199.7
Flour, wheat, per barrel—						
Winter patents, Kansas City.....	7.185	7.731	7.813	179.1	192.7	194.8
Winter straights, Kansas City.....	6.580	6.963	7.063	171.0	181.0	183.6
Standard patents, Minneapolis.....	7.250	7.830	7.913	158.2	170.8	172.6
Second patents, Minneapolis.....	6.969	7.560	7.625	157.6	171.0	172.4
Patents, Portland, Oreg.....	7.340	7.884	8.060	163.3	175.4	179.3
Patents, soft, winter, St. Louis.....	6.330	6.800	7.213	138.6	148.9	158.0
Straights, soft, winter, St. Louis.....	5.535	6.088	6.381	130.1	143.1	150.0
Patents, Toledo.....	6.265	6.950	6.938	132.6	147.1	146.8
Fruit, canned, per case, New York—						
Peaches, California, standard, 2½s.....	1.881	1.775	1.775	124.0	117.0	117.0
Pineapples, Hawaiian, sliced, standard, 2½s.....	2.225	2.250	2.250	108.4	109.6	109.6
Fruit, dried, per pound, New York—						
Apples, evaporated, State choice.....	.093	.097	.103	129.7	135.1	143.2
Currants, Patras, cleaned.....	(?)	(?)	(?)			
Prunes, California, 60-70s.....	.071	.071	.069	108.7	108.7	105.8
Raisins, coast, seeded, bulk.....	.083	.069	.069	113.6	94.8	94.8
Fruits, fresh—						
Apples, Baldwin, per barrel, Chicago.....	3.625	4.500	4.500	114.2	141.8	141.8
Bananas, Jamaica, 9s, per bunch, New York.....	2.000	2.000	1.688	130.0	130.0	109.8
Lemons, California, choice, per box, Chicago.....	5.000	5.535	6.313	86.6	95.9	109.3
Oranges, California, choice, per box, Chicago.....	5.344	5.925	6.406	120.9	134.1	144.9
Glucose, 42° mixing, per 100 pounds, New York.....	3.335	3.160	3.160	156.0	147.8	147.8
Hominy grits, bulk, car lots, per 100 pounds, f. o. b. mill.....	1.525	1.947	2.068	92.4	118.0	125.3
Lard, prime, contract, per pound, New York.....	.128	.129	.131	116.2	117.1	118.5
Meal, corn, per 100 pounds—						
White, f. o. b. mill.....	1.525	1.947	2.068	95.3	121.6	125.3
Yellow, Philadelphia.....	2.205	2.675	3.075	160.1	186.6	214.5
Molasses, New Orleans, fancy, per gallon, New York.....	.650	.650	.650	170.6	170.6	170.6
Oatmeal, car lots, in sacks (90 pounds), per 100 pounds, New York.....	3.458	3.617	3.681	139.7	146.1	148.7

<sup>1</sup> No quotation.<sup>2</sup> No. 1913 base price.<sup>3</sup> As to score.

WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>FOODS—Continued</b>						
<b>Other foods—Continued.</b>						
Oleomargarine, standard, uncolored, per pound, Chicago.....	\$0.215	\$0.215	\$0.215	132.3	132.3	132.3
Qeo oil, extra, per pound, Chicago.....	.115	.126	.132	99.9	109.1	114.3
Pepper, black, per pound, New York.....	.248	.288	.320	228.7	265.0	294.7
Rice. (See Farm products.)						
Salt, American, medium, per barrel (280 pounds), Chicago.....	2.195	2.195	2.195	215.2	215.2	215.2
Sugar, per pound, New York—						
Granulated, in barrels.....	.058	.060	.060	136.5	140.5	141.5
Raw, 96° centrifugal.....	.048	.048	.046	137.4	138.9	132.3
Tallow, edible, per pound, Chicago.....	.080	.081	.084	100.9	102.1	105.7
Tea, Formosa, fine, per pound, New York.....	.345	.345	.345	138.9	138.9	138.9
Vegetables, canned, per dozen, New York—						
Corn, Maryland, standard.....	.975	.975	.975	153.7	153.7	153.7
Peas, State and western, No. 5.....	1.225	1.225	1.225	141.4	141.4	141.4
Tomatoes, New Jersey, standard, No. 3.....	1.500	1.500	1.500	115.4	115.4	115.4
Vegetables, fresh. (See Farm products.)						
Vegetable oil—						
Coconut, crude, per pound, New York.....	.096	.098	.097	78.4	80.0	79.5
Corn, crude, in barrels, per pound, New York.....	.098	.099	.110	160.6	163.8	181.2
Cottonseed, prime, summer, yellow, per pound, New York.....	.091	.091	.092	125.7	125.4	126.6
Olive oil, edible, in barrels, per gallon, New York.....	2.150	2.150	2.150	127.4	127.4	127.4
Peanut, crude, per pound, f. o. b. mill.....	.125	.125	.125	(*)	(*)	(*)
Soya bean, crude, in barrels, per pound, New York.....	.120	.121	.120	196.1	197.1	196.1
Vinegar, cider, 40-grain, in barrels, per gallon, New York.....	.180	.180	.185	161.3	161.3	165.7
<b>CLOTHING MATERIALS</b>						
<b>Boots and shoes</b>						
Children's, per pair, factory—						
Child's, gun metal, polish, high cut.....	1.330	1.330	1.330	181.7	181.7	181.7
Little boy's, tan, calf, blucher.....	1.473	1.473	1.473	166.5	166.5	166.5
Misses', gun metal, polish, high cut.....	1.568	1.568	1.568	173.2	173.2	173.2
Youth's, tan, calf, blucher.....	1.663	1.663	1.663	143.4	143.4	143.4
Men's, per pair, factory—						
Black, calf, blucher.....	6.400	6.400	6.400	205.6	205.6	205.6
Black, calf, Goodyear welt, bal.....	4.850	4.850	4.850	153.2	153.2	153.2
Black, dress, Goodyear welt, side leather.....	3.150	3.150	3.150	140.8	140.8	140.8
Black, vic kid, Goodyear welt.....	6.000	6.000	6.000	209.3	209.3	209.3
Chocolate, elk, blucher.....	1.750	1.805	1.880	122.8	126.7	132.0
Gun metal, Goodyear welt, blucher.....	4.600	4.600	4.600	235.3	235.3	235.3
Mahogany, chrome side, Goodyear welt, bal.....	3.600	3.600	3.600	223.3	223.3	223.3
Tan, dress, Goodyear welt, calf.....	4.850	4.850	4.850	153.2	153.2	153.2
Tan, dress, Goodyear welt, side leather.....	3.350	3.350	3.350	149.7	149.7	149.7
Women's, per pair, factory—						
Black, kid, dress, welt, lace, oxford.....	4.000	4.000	4.000	142.8	42.8	142.8
Black, kid, McKay sewed, lace, oxford.....	3.600	3.600	3.600	241.7	241.7	241.7
Colored, calf, Goodyear welt, lace, oxford.....	4.150	4.150	4.150	190.9	190.9	190.9
Patent-leather pump, McKay sewed.....	3.600	3.600	3.600	261.8	261.8	261.8
<b>Cotton goods</b>						
Denims, Massachusetts, 28-inch, 2.20 yards to the pound, per yard, factory.....	.147	.154	.157	114.4	119.8	122.2
Drilling, brown, per yard, factory—						
Massachusetts, D standard, 30-inch.....	.110	.116	.121	133.4	130.9	146.0
Peppercell, 29-inch, 2.85 yards to the pound.....	.106	.106	.109	129.2	129.2	132.7
Flannels, per yard, factory—						
Colored, 4.20 yards to the pound.....	(*)	(*)	(*)			
Unbleached, 3.20 yards to the pound.....	(*)	(*)	(*)			
Gingham, per yard, factory—						
Amoskeag, 27-inch, 6.37 yards to the pound.....	.090	.090	.090	138.5	138.5	138.5
Security, 32-inch, 5.60 yards to the pound.....	.123	.123	.123	201.8	201.8	201.8
Hosiery, per dozen pairs, factory—						
Men's half hose, combed yarn.....	1.600	1.600	1.550	198.8	198.8	192.7
Women's, cotton, silk mercerized, mock seam.....	2.275	2.275	2.275	128.4	128.4	128.4
Women's, combed yarn, 16-ounce.....	1.666	1.666	1.666	166.6	166.6	166.6
Muslin, bleached, 4/4, per yard, factory—						
Fruit of the Loom.....	.157	.157	.162	183.8	183.8	189.3
Lonsdale.....	.137	.137	.137	169.8	169.8	169.6
Rough Rider.....	.146	.149	.152	181.4	185.5	189.0
Wamsutter, plainweave.....	.205	.205	.205	244.2	244.2	244.2

#### 1 No annotation

<sup>2</sup> No 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>CLOTHING MATERIALS—Continued</b>						
<b>Cotton goods—Continued.</b>						
Print cloth, per yard, factory—						
27-inch, 7.60 yards to the pound.....	\$0.049	\$0.052	\$0.055	141.5	151.3	158.6
38½-inch, 5.35 yards to the pound.....	.068	.071	.073	128.5	133.3	138.0
Sheeting, brown, 4/4, per yard, factory—						
Indian Head, 2.85 yards to the pound.....	.105	.106	.108	124.7	125.8	127.7
Pepperell, 3.75 yards to the pound.....	.108	.108	.112	146.7	147.8	152.9
Trion, 4 yards to the pound.....	.081	.082	.084	131.9	133.4	136.5
Thread, 6-cord, J. & P. Coats, per 200 yards, factory.....	.073	.073	.073	186.0	186.0	186.0
Underwear, factory—						
Men's shirts and drawers, per dozen garments.....	6.039	6.039	6.039	168.9	168.9	168.9
Women's union suits, carded yarn, per dozen.....	8.500	8.500	8.500	140.2	140.2	140.2
Yarn, per pound, factory—						
Carded, white, mulespun, northern, 10/1, cones.....	.270	.288	.294	121.8	129.9	132.9
Carded, white, mulespun, northern, 22/1, cones.....	.312	.335	.346	126.2	135.4	140.0
Carded, weaving, 40/1.....	.446	.456	.470	132.4	135.5	139.5
Twisted, ordinary weaving, 20/2.....	.279	.295	.301	120.1	126.9	129.3
Twisted, ordinary weaving, 40/2.....	.418	.447	.454	109.0	116.7	118.6
<b>Woolen and worsted goods.</b>						
Flannel, white, 4/4, Ballard Vale, No. 3, per yard, factory.....	(1)	(1)	(1)			
Overcoating, 30 to 31 ounces, per yard, factory.....	3.250	3.000	3.000	187.4	173.0	173.0
Suiting, per yard, factory—						
Clay worsted, diagonal, 16-ounce.....	2.655	2.655	2.655	192.1	192.1	192.1
Middlesex, wool-dyed, blue, 16-ounce.....	3.285	3.285	3.285	212.6	212.6	212.6
Serge, 9½-ounce.....	1.395	1.395	1.395	219.0	219.0	219.0
Serge, 11-ounce.....	2.048	2.048	2.048	181.1	181.1	181.1
Trousering, cotton warp, 11-ounce, per yard, factory.....	1.500	1.500	1.500	132.6	132.6	132.6
Underwear, factory—						
Merino shirts and drawers, per dozen garments.....	28.000	28.000	28.000	143.1	143.1	143.1
Men's union suits, 33 per cent worsted, per dozen.....	27.440	27.440	27.440	279.6	279.6	279.6
Women's dress goods, per yard, factory—						
Broadcloth, 9½-ounce, 54-56 inch.....	2.255	2.255	2.255	171.6	171.6	171.6
French serge, all wool, 39-inch.....	.975	.975	.975	208.1	208.1	208.1
Serge, cotton warp, 36-inch.....	.510	.510	.510	202.4	202.4	202.4
Sicilian cloth, cotton warp, 54-inch.....	.775	.775	.775	203.8	203.8	203.8
Flannel, all wool, 54-inch.....	1.325	1.325	1.325	173.4	173.4	173.4
Yarn, per pound, factory—						
Crossbred, stock 2/32s.....	1.350	1.325	1.325	173.8	170.6	170.6
Half blood, 2/40s.....	1.775	1.775	1.738	159.0	159.0	155.6
Fine, domestic, 2/50s.....	2.075	2.075	2.038	196.8	196.8	193.3
<b>Silk, etc.</b>						
Linen shoe thread, 10s, Barbour, per pound, New York.....						
Silk, raw, per pound, New York—						
China, Canton, filature, extra extra A.....	4.373	4.226	4.100	125.0	120.8	117.2
Japan, Best 1/X.....	5.537	5.390	5.194	152.1	148.1	142.7
Japan, double extra crack.....	6.125	5.831	5.488	150.3	143.1	134.6
Silk yarn, per pound, New York—						
Domestic, gray spun, 60/1.....	4.214	4.165	4.214	144.5	142.8	144.5
Domestic, gray spun, 60/2, No. 1.....	5.194	5.096	5.096	149.8	147.0	147.0
<b>FUELS.</b>						
<b>Anthracite coal.</b>						
Average spot price for 8 cities, per gross ton—						
Chestnut.....	12.932	12.871	13.057	(2)	(2)	(2)
Egg.....	12.376	12.391	12.535	(2)	(2)	(2)
Pea.....	10.554	10.544	10.648	(2)	(2)	(2)
Tidewater, New York, average sales realization, per gross ton—						
Broken.....	(1)	(1)	(1)			
Chestnut.....	10.578	10.578	10.771	199.1	199.1	202.7
Egg.....	10.583	10.590	10.746	209.0	209.1	212.2
Stove.....	11.181	11.171	11.305	220.9	220.7	223.4
<b>Bituminous coal.</b>						
Baltimore, per net ton, mine run, pools 1-11-71.....	(1)	4.940	(1)	(2)	(2)	(2)
Birmingham, per net ton—						
Mine run, Jagger district.....	2.790	2.790	2.790	(2)	(2)	(2)
Prepared sizes, Jagger district.....	3.290	3.440	3.590	(2)	(2)	(2)
Screenings, Jagger district.....	2.540	2.540	2.540	(2)	(2)	(2)

<sup>1</sup> No quotation.<sup>2</sup> No 1013 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

	Commodity	Average prices			Index numbers (1913=100)			
		April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927	
<b>FUELS—Continued</b>								
<b>Bituminous coal—Continued.</b>								
Chicago, per net ton—								
Mine run, southern Illinois	\$4.450	\$4.600	\$4.600	(1)	(1)	(1)		
Prepared sizes, southern Illinois	4.838	4.800	4.800	(1)	(1)	(1)		
Screenings, central Illinois	3.625	(1)	(1)	(1)				
Cincinnati, per net ton—								
Mine run, Kanawha	3.640	3.640	3.640	165.5	165.5	165.5		
Mine run, New River	4.240	4.240	4.240	175.8	175.8	175.8		
Cleveland, per net ton—								
Mine run, Ohio, Pittsburgh, No. 8	3.640	(1)	(1)	(1)				
Prepared sizes, West Virginia, high volatile	4.434	4.515	4.598	(1)	(1)	(1)		
Screenings, Ohio, Pittsburgh, No. 8	3.265	(1)	(1)	(1)				
Indianapolis, mine run, per net ton	3.640	3.890	3.890	(1)	(1)	(1)		
Norfolk, Va., mine run, Pocahontas, per gross ton	4.225	4.250	4.375	140.8	141.7	145.8		
Pittsburgh, prepared sizes, per net ton	3.630	3.380	3.380	(1)	(1)	(1)		
St. Louis, per net ton—								
Mine run, southern Illinois	(1)	(1)	(1)					
Prepared sizes, southern Illinois	(1)	(1)	(1)					
Screenings, southern Illinois	(1)	(1)	(1)					
<b>Other fuels.</b>					118.3	113.6	113.1	
Coke—								
Alabama, foundry, per net ton, at oven	6.000	6.000	6.000	(1)	(1)	(1)		
Connellsville, furnace, per net ton, at oven	3.494	2.940	3.169	143.2	120.5	120.9		
Fuel oil, f. o. b. refinery—								
Oklahoma, 24-26, per barrel	1.063	.925	.906	117.8	102.5	100.5		
Pennsylvania, 36-40, per gallon	.055	.050	.047	(1)	(1)	(1)		
Gasoline—								
Motor, per gallon, tank wagon, New York	.194	.190	.190	115.3	112.9	112.9		
Motor, per gallon, f. o. b. refinery—								
Oklahoma, 58-60	.063	.065	.066	(1)	(1)	(1)		
Pennsylvania, 58-60	.089	.089	.089	(1)	(1)	(1)		
Natural, Grade B, per gallon, f. o. b. refinery, Oklahoma	.043	.049	.048	(1)	(1)	(1)		
Crude petroleum, per barrel, at well—								
California, 20° to 20.9°	.900	.850	.850	257.1	242.9	242.9		
Kansas-Oklahoma, 33° to 33.9°	1.114	1.155	1.155	119.2	123.6	123.6		
Pennsylvania	3.025	2.900	2.900	123.5	118.4	118.4		
Refined petroleum, per gallon, f. o. b. refinery—								
Standard white, 110° fire test	.067	.063	.063	158.9	148.7	148.7		
Water white, Pennsylvania	.079	.076	.072	128.1	122.8	116.9		
<b>METALS AND METAL PRODUCTS</b>								
<b>Iron and steel.</b>					121.9	120.6	119.6	
Iron ore, per ton, lower lake ports—						131.7	131.9	
Mesabi, Bessemer, 51½ per cent	4.400	4.400	4.400	114.3	114.3	114.3		
Non-Bessemer, 51½ per cent	4.250	4.250	4.250	125.0	125.0	125.0		
Pig iron, per gross ton—								
Basic, valley furnace	19.000	18.200	17.875	120.2	123.8	121.6		
Bessemer, Pittsburgh	21.260	20.960	20.635	124.1	122.3	120.4		
Foundry, No. 2, northern, Pittsburgh	20.260	20.260	19.890	126.6	126.6	124.2		
Foundry, No. 2, southern, Birmingham, Ala.	18.000	18.000	18.000	154.0	154.0	154.0		
Ferromanganese, seaboard	100.000	94.000	90.000	171.6	161.3	154.4		
Spiegeleisen, 19 and 21 per cent, furnace	37.000	36.600	35.875	148.0	146.4	143.5		
Bar iron, per pound—								
Best refined, Philadelphia	.028	.028	.028	147.9	147.9	147.9		
Common, Pittsburgh	.028	.028	.028	166.7	166.7	166.7		
Bars, reinforcing, per 100 pounds, Pittsburgh	1.900	1.900	1.900	138.1	138.1	138.1		
Nails, wire, per 100 pounds, Pittsburgh	2.650	2.600	2.600	145.7	143.0	143.0		
Pipe, cast-iron, 6-inch, per net ton, New York	47.975	46.800	45.425	205.3	200.2	194.4		
Skelp, grooved, per 100 pounds, Pittsburgh	1.900	1.860	1.800	136.7	133.8	129.5		
Steel billets, per gross ton, Pittsburgh—								
Bessemer	33.250	33.000	33.000	128.9	128.0	128.0		
Open hearth	33.250	33.000	33.000	127.4	126.5	126.5		
Steel merchant bars, per 100 pounds, Pittsburgh	1.888	1.850	1.813	121.9	119.5	117.1		
Steel plates, tank, per pound, Pittsburgh	.019	.018	.018	125.0	124.3	121.6		
Steel rails, per gross ton, Pittsburgh—								
Bessemer, standard	43.000	43.000	43.000	153.6	153.6	153.6		
Open hearth, standard	43.000	43.000	43.000	143.3	143.3	143.3		
Steel sheets, per pound, Pittsburgh	.030	.031	.032	134.7	140.6	143.8		
Steel, structural shapes, per 100 pounds, Pittsburgh	1.900	1.900	1.850	125.8	125.8	122.5		

<sup>1</sup> No quotation.<sup>2</sup> No 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>METALS AND METAL PRODUCTS—Continued</b>						
<b>Iron and steel—Continued.</b>						
Terneplate, 8 pounds, I. C., per base box (200 pounds), Pittsburgh	\$11.700	\$11.700	\$11.700	168.7	168.7	168.7
Tin plate, domestic coke, per 100 pounds, Pittsburgh	5.500	5.500	5.500	154.6	154.6	154.6
Wire, per 100 pounds—						
Barbed, galvanized, Chicago	3.300	3.270	3.250	142.9	141.6	140.7
Plain, fence, annealed, Pittsburgh	2.550	2.540	2.513	168.6	167.9	166.1
<b>Nonferrous metals.</b>						
Aluminum, per pound, New York	.256	.255	.254	108.4	97.7	96.7
Copper, ingot, electrolytic, per pound, refinery	.128	.126	.124	81.6	80.2	78.7
Copper, sheet, per pound, New York	.208	.207	.204	97.9	97.7	96.4
Copper wire, bare, per pound, mill	.151	.149	.147	90.1	89.3	87.7
Lead, pig, per pound, New York	.071	.066	.064	162.0	150.0	146.1
Lead pipe, per 100 pounds, New York	8.707	8.205	7.840	171.3	161.5	154.3
Quicksilver, per pound, New York	1.605	1.632	1.570	287.9	292.6	277.9
Silver, bar, fine, per ounce, New York	.567	.566	.571	92.6	92.4	93.2
Tin, pig, per pound, New York	.682	.674	.673	152.0	150.1	149.9
Zinc, sheet, per 100 pounds, factory	9.466	8.793	8.793	130.7	121.4	121.4
Zinc, slab, per pound, New York	.067	.064	.066	115.1	110.5	113.0
<b>BUILDING MATERIALS.</b>						
<b>Lumber.</b>						
Douglas fir, per 1,000 feet, mill—						
No. 1, common boards	17.240	16.560	16.340	187.2	179.8	177.5
No. 2 and better, drop siding	30.030	30.510	30.080	173.2	176.0	173.5
Gum, sap, firsts and seconds, per 1,000 feet, St. Louis	58.750	62.750	66.000	284.0	303.5	318.1
Hemlock, northern, No. 1, per 1,000 feet, Chicago	34.000	34.000	34.000	161.3	161.3	161.3
Maple, hard, No. 1, common, 4/4, per 1,000 feet, Chicago	51.500	51.500	51.500	170.9	170.9	170.9
Oak, white, plain, No. 1, common, 4/4, per 1,000 feet, Cincinnati	65.000	67.000	67.000	175.6	181.1	181.1
Pine, white, No. 2, barn, per 1,000 feet, Buffalo, N. Y.	47.000	47.000	47.000	160.8	160.8	160.8
Pine, yellow, flooring, long leaf, B and better, per 1,000 feet, New York	89.000	88.000	88.000	199.6	197.3	197.3
Pine, yellow, southern, per 1,000 feet, mill—						
Boards, No. 2, common, 1×8	21.120	20.920	20.780	165.8	164.3	163.2
Flooring, B and better	39.560	39.320	38.960	171.7	170.7	169.1
Timbers, square edge and sound	27.000	(1)	26.420	184.5		180.5
Poplar, No. 1, common, 4/4, per 1,000 feet, Cincinnati	55.000	55.000	55.000	166.5	166.5	166.5
Spruce, eastern, random, per 1,000 feet, Boston	32.438	33.250	33.250	149.6	153.4	153.4
Lath, yellow pine, No. 1, per 1,000, mill	3.510	3.500	3.280	115.4	115.2	107.9
Shingles, per 1,000, mill—						
Cypress, 16 inches long	6.000	5.750	5.750	169.4	162.4	162.4
Red cedar, 16 inches long	2.450	2.450	2.470	124.6	124.6	125.6
<b>Brick.</b>						
Common building, per 1,000—						
Simple average of 82 yard prices	14.066	14.053	14.029	207.1	206.9	206.5
Run of kiln, f. o. b. plant, Chicago	8.760	9.290	8.730	177.4	188.1	176.8
<b>Structural steel.</b>						
<b>Other building materials.</b>						
Cement, Portland, per barrel, f. o. b. plant—						
Simple average of 6 plant prices in Pennsylvania, Indiana, Minnesota, Texas, and California	1.683	1.683	1.683	162.1	162.1	162.1
Buffington, Ind.	1.600	1.600	1.600	158.3	158.3	158.3
Northampton, Pa.	1.550	1.550	1.550	174.2	174.2	174.2
Crushed stone, 1½-inch, per cubic yard, New York	1.840	1.840	1.840	204.4	204.4	204.4
Gravel, per ton, f. o. b. pit, simple average of 28 plant prices	.908	.907	.907	183.6	183.5	183.5
Hollow tile, building, per block, Chicago	.076	.076	.076	118.8	118.8	118.8
Lime, common, lump, per ton, f. o. b. plant, simple average of 15 plant prices	8.841	8.804	8.754	214.2	213.4	212.1
Roofing, prepared, per square, f. o. b. factory—						
Medium weight	1.578	1.598	1.598	(1)	(1)	(1)
Shingles, individual	5.488	5.535	5.535	(2)	(2)	(2)
Shingles, strip	4.957	4.962	4.962	(2)	(2)	(2)
Slate surfaced	1.988	2.015	2.015	(2)	(2)	(2)
Sand, building, per ton, f. o. b. pit, simple average of 31 plant prices	.586	.586	.586	153.7	153.7	153.7
Slate, roofing, per 100 square feet, f. o. b. quarry	14.000	14.000	14.000	302.7	302.7	302.7

<sup>1</sup> No quotation.<sup>2</sup> No 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)		
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927
<b>BUILDING MATERIALS—Continued</b>						
Other building materials—Continued.						
Glass, plate, per square foot, New York—	\$0.320	\$0.320	\$0.320	135.2	135.2	135.2
3 to 5 square feet.....	.400	.400	.400	125.7	125.7	125.7
5 to 10 square feet.....						
Glass, window, per 50 square feet, f. o. b. works—						
Single A.....	3.600	3.600	3.600	158.3	158.3	158.3
Single B.....	3.135	3.135	3.135	141.2	141.2	141.2
Linseed oil, per pound, New York.....	.106	.115	.112	172.4	187.1	181.8
Putty, commercial, per pound, New York.....	.055	.060	.060	207.5	226.4	226.4
Rosin (B), per barrel, New York.....	9.700	9.670	9.925	201.4	200.8	206.1
Turpentine, southern, barrels, per gallon, New York.....	.671	.625	.570	156.7	145.9	133.2
White lead, American, in oil, per pound, New York.....	.146	.145	.141	214.5	214.5	209.0
Zinc oxide (white zinc), per pound, New York.....	.066	.066	.066	122.7	123.2	123.2
Pipe, cast-iron. (See Metals and metal products.)						
Copper, sheet. (See Metals and metal products.)						
Copper wire. (See Metals and metal products.)						
Lead pipe. (See Metals and metal products.)						
Nails. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal products.)						
Roofing tin (terneplate). (See Metals and metal products.)						
Zinc, sheet. (See Metals and metal products.)						
<b>CHEMICALS AND DRUGS</b>						
Chemicals				121.8	121.9	121.8
Acids, per pound, New York—				116.3	117.3	117.2
Acetic, 28 per cent, barrels.....	.034	.034	.034	174.2	174.2	174.2
Muriatic, 20°, tanks.....	.010	.010	.010	73.1	73.1	73.1
Nitric, 42°, carboys.....	.065	.065	.065	133.2	133.2	133.2
Salicylic, U. S. P., barrels.....	.400	.400	.400	141.1	141.1	141.1
Stearic, triple pressed, bags.....	.138	.133	.133	103.8	100.0	100.0
Sulphuric, 66°, tank cars.....	.008	.008	.008	75.0	75.0	75.0
Alcohol, per gallon, New York—						
Denatured, No. 5, 188 proof.....	.465	.493	.500	127.1	134.6	136.7
Wood, refined, 95 per cent.....	.830	.830	.660	173.5	173.5	138.0
Alum, lump, per pound, New York.....	.034	.034	.034	191.4	191.4	191.4
Ammonia, anhydrous, per pound, New York.....	.100	.100	.113	40.0	40.0	45.0
Benzol, pure, per gallon, f. o. b. works.....	.240	.240	.230	88.1	88.1	84.4
Bleaching powder, per 100 pounds, New York.....	2.000	2.000	2.000	169.5	160.5	169.5
Borax, crystals and granulated, per pound, New York.....	.043	.043	.043	113.3	113.3	113.3
Coal-tar colors, per pound, New York—						
Black, direct.....	.400	.400	.400	125.0	125.0	125.0
Brown, sulphur.....	.240	.240	.240	109.1	109.1	109.1
Indigo, 20 per cent.....	.140	.140	.140	77.8	77.8	77.8
Copper sulphate, 99 per cent crystals, per pound.....	.049	.049	.049	93.1	94.1	94.1
Copra, South Sea. (See Foods.)						
Creosote oil, grade 1, per gallon, f. o. b. works.....	.160	.160	.160	(*)	(*)	(*)
Formaldehyde, per pound, New York.....	.113	.113	.099	133.4	133.4	117.9
Oil, vegetable—						
Coconut, crude. (See Foods.)						
Corn, crude. (See Foods.)						
Palm kernel, crude, per pound, New York.....	.000	.000	.089	88.6	89.1	88.2
Soya bean, crude. (See Foods.)						
Potash, caustic, 88-92 per cent, per pound, New York.....	.074	.075	.075	207.7	209.8	209.8
Sal soda, per 100 pounds, New York.....	.900	.900	.900	150.0	150.0	150.0
Soda ash, 58 per cent, light, per 100 pounds, New York.....	2.290	2.290	2.290	302.6	392.6	392.6
Soda, bicarbonate, American, per pound, f. o. b. works.....	.019	.019	.019	175.0	175.0	175.0
Soda, caustic, 76 per cent, solid, per pound, New York.....	.038	.038	.038	257.5	257.5	257.5
Soda, silicate of, 40°, per 100 pounds, New York.....	.750	.750	.750	118.1	118.1	118.1
Sulphur, crude, per gross ton, f. o. b. mines.....	18.000	18.000	18.000	81.8	81.8	81.8
Tallow, inedible, packers' prime, per pound, Chicago.....	.077	.078	.079	109.2	110.0	111.5
Fertilizer materials				105.6	104.9	103.8
Acid phosphate, 16 per cent basis, bulk, per ton, Baltimore.....	8.750	8.750	8.250	113.7	113.7	107.2
Ammonia, sulphate, double bags, per 100 pounds, New York.....	2.480	2.375	2.300	79.2	76.0	73.5
Ground bone, steamed, per ton, Chicago.....	28.000	28.000	28.000	139.1	139.1	139.1
Muriate of potash, 80-85 per cent, bags, per ton, New York.....	36.400	36.400	36.400	95.5	95.5	95.5
Phosphate rock, 68 per cent, per ton, f. o. b. mines.....	3.000	3.000	3.000	88.0	88.0	88.0
Soda, nitrate, 95 per cent, per 100 pounds, New York.....	2.640	2.613	2.713	106.9	105.8	109.9
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago.....	35.750	34.063	38.000	133.0	145.8	162.7

\* No 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

Commodity	Average prices			Index numbers (1913=100)	
	April, 1927	May, 1927	June, 1927	April, 1927	May, 1927
<b>CHEMICALS AND DRUGS—Continued</b>					
<b>Drugs and pharmaceuticals</b>					
Acid, citric, domestic, crystals, per pound, New York	\$0.435	\$0.440	\$0.445	150.6	150.0
Acid, tartaric, crystals, U. S. P., per pound, New York	.334	.348	.360	109.6	113.9
Alcohol, grain, 188 proof, U. S. P., per gallon, New York	3.750	3.750	3.750	150.0	150.0
Cream of tartar, powdered, per pound, New York	.238	.255	.270	99.7	106.9
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.350	2.350	2.350	213.6	213.6
Glycerin, refined, per pound, New York	.260	.258	.253	131.9	130.6
Opium, natural, U. S. P., per pound, New York	12.000	12.000	12.000	199.4	199.4
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	7.750	7.750	7.750	193.8	193.8
Phenol (carbolic acid), U. S. P., per pound, New York	.168	.160	.160	153.0	145.7
Quinine, sulphate, manufacturers' quotations, per ounce, New York	.400	.400	.400	182.1	182.1
				157.4	157.4
<b>HOUSE-FURNISHING GOODS</b>					
<b>Furniture</b>					
Bedroom, average price, factory—				137.6	137.6
Beds, each	31.414	31.402	31.402	(2)	(2)
Chairs, each	7.974	7.974	7.974	(2)	(2)
Dressers, each	41.545	41.545	41.545	(2)	(2)
Rockers, each	7.632	7.632	7.632	(2)	(2)
Dining room, average price, factory—					
Buffets, each	40.458	40.458	40.458	(2)	(2)
Chairs, set of six	37.772	37.772	37.772	(2)	(2)
Tables, extension, each	50.572	50.572	50.572	(2)	(2)
Kitchen, average price, factory—					
Cabinets, each	33.000	33.000	33.000	(2)	(2)
Chairs, per dozen	14.950	14.950	14.950	(2)	(2)
Refrigerators, each	(1)	(1)	(1)		
Tables, porcelain top, each	7.500	7.500	7.500	(2)	(2)
Living room, average price, factory—					
Chairs, each	31.558	31.558	31.558	(2)	(2)
Davenport, each	58.346	58.346	58.346	(2)	(2)
Tables, each	20.417	20.417	20.417	(2)	(2)
				222.2	222.3
<b>Furnishings</b>					
Blankets, factory—					
Cotton, colored, 2 pounds to the pair, per pair	1.020	1.020	1.020	168.8	168.6
Wool, 4 to 5 pounds to the pair, per pound	1.313	1.313	1.313	171.7	171.7
Carpets, per yard, factory—					
Axminster, Bigelow	3.120	3.120	3.120	232.9	232.9
Brussels, Bigelow	2.976	2.976	2.976	230.3	230.3
Wilton, Bigelow	4.896	4.896	4.800	203.3	199.3
Cutlery, factory—					
Carvers, 8-inch, per pair	1.350	1.350	1.350	180.0	180.0
Knives and forks, per gross	12.500	12.500	12.500	217.4	217.4
Pails, galvanized-iron, 10-quart, per gross, factory	20.800	21.050	21.050	141.8	143.5
Sheeting, bleached, 10/4, per yard, factory—					
Pepperell	.369	.369	.369	154.1	154.1
Wamsutta, P. L.	1.140	1.140	1.140	294.5	294.5
Tableware, factory—					
Dinner sets, per set—					
Semivitreous, 100 pieces	19.860	19.860	19.860	(2)	(2)
Vitreous, 104 pieces	45.700	45.700	45.700	196.4	196.4
Glass nappies, 4-inch, per dozen	.200	.200	.200	181.8	181.8
Glass pitchers, 1/2-gallon, per dozen	2.100	2.100	2.100	262.5	262.5
Glass tumblers, 1/2-pint, per dozen	.160	.160	.160	133.3	133.3
Plates, white granite, 7-inch, per dozen	.980	.980	.980	211.5	211.5
Teacups and saucers, white granite, per dozen	1.200	1.200	1.200	221.0	221.0
Ticking, Amoskeag, A. C. A., 2.05 yards to the pound, per yard, factory	.195	.200	.205	144.9	148.6
Tubs, galvanized-iron, No. 3, per dozen, factory	6.367	6.475	6.475	155.1	157.7
				118.5	120.3
<b>MISCELLANEOUS</b>					
<b>Cattle feed</b>					
Bran, per ton, Minneapolis	27.735	28.250	26.188	149.1	149.2
Cottonseed meal, prime, per ton, Memphis	33.250	34.250	36.750	117.4	121.0
Linseed meal, per ton, New York	44.000	46.000	46.750	154.8	161.9
Mill feed, middlings, standard, per ton, Minneapolis	27.563	29.025	28.938	141.7	149.2

<sup>1</sup> No quotation.<sup>2</sup> No. 1913 base price.

## WHOLESALE PRICES OF COMMODITIES, APRIL, MAY, AND JUNE, 1927—Continued

	Commodity	Average prices			Index numbers (1913=100)			
		April, 1927	May, 1927	June, 1927	April, 1927	May, 1927	June, 1927	
<b>MISCELLANEOUS—Continued</b>								
0 10.1	Leather							
1 102.1	Calf, chrome, B grade, per square foot, Boston	\$0.460	\$0.480	\$0.480	137.4	142.2	148.6	
9 113.0	Glazed kid, black, top grade, per square foot, Boston	.675	.675	.675	170.6	178.0	178.0	
0 150.0	Harness, California, oak, No. 1, per pound, Chicago	.436	.436	.440	269.6	269.6	269.6	
9 113.3	Side, black, chrome, B grade, per square foot, Boston	.250	.280	.320	108.7	108.7	109.8	
Sole, per pound—				97.7	109.5	125.1		
Oak, in sides, middle weight, tannery run, Boston	.350	.350	.380	117.4	117.4	127.5		
Oak, scoured backs, heavy, Boston	.430	.450	.490	95.8	100.3	109.2		
Union, middle weight, New York	.440	.441	.464	109.6	110.0	115.6		
<b>Paper and pulp</b>								
193.8	Box board, per ton f. o. b. mill—							
Chip	.41.184	.41.184	.41.184	(1)	(2)	(2)		
145.7	Manila lined chip	.51.084	.51.084	.51.084	(2)	(2)	(2)	
	85-pound test liner	.69.300	.64.350	.64.350	(2)	(2)	(2)	
182.1	Paper—							
Newsprint, roll, per pound, f. o. b. mill	.033	.033	.033	157.1	157.1	157.1		
157.3	Wrapping, manila, No. 1, jute, per pound, New York	.093	.093	.093	189.6	189.6	189.6	
137.6	Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York	2.750	2.630	2.600	123.6	118.2	116.9	
<b>Other miscellaneous</b>								
Burlap, 10½-ounce, 40-inch, per yard, New York	.096	.087	.090	99.5	100.8	99.5		
Cylinder oil, gallon, refinery—				120.1	108.9	111.6		
Oklahoma, medium, filtered stock	.180	.172	.170	(1)	(2)	(2)		
Pennsylvania, 600, filtered, D.	.240	.240	.243	(2)	(2)	(2)		
Hemp, manila, fair, current, shipment, per pound, New York	.142	.140	.141	152.9	150.3	151.8		
Jute, raw, medium grade, per pound, New York	.070	.064	.064	104.5	95.7	95.7		
Lubricating oil, paraffin, 903 gravity, per gallon, New York	.240	.240	.240	168.4	168.4	168.4		
Rope, pure manila, best grade, per pound, New York	.250	.245	.245	170.4	167.0	167.0		
Rubber, per pound, New York—								
Para, island, fine	.274	.300	.278	34.0	37.2	34.4		
Plantation, ribbed, smoked, sheets	.410	.410	.371	50.0	50.0	45.2		
Sisal, Mexican, current shipment, per pound, New York	.076	.076	.076	175.0	175.0	175.0		
Soap—								
Laundry, per 100 cakes, Cincinnati	4.180	4.180	4.180	135.6	135.6	135.6		
Laundry, per 100 cakes, Philadelphia	4.851	4.851	4.851	137.5	137.5	137.5		
Starch, laundry, bulk, per pound, New York	.058	.058	.058	157.5	157.5	157.5		
Tobacco—								
Plug, per pound, New York	.696	.696	.696	179.0	179.0	179.0		
Smoking, 1-ounce bags, per gross, New York	8.320	8.320	8.320	147.5	147.5	147.5		
<b>Raw materials</b> <sup>b</sup>								
180.0	Producers' goods							
217.4					120.3	120.5	119.9	
43.5	Consumers' goods							
54.1					154.9	155.4	154.3	
94.5	<b>ALL COMMODITIES (494 price series)</b>							
					144.3	144.1	143.7	

<sup>a</sup> No 1913 base price.<sup>b</sup> Federal Reserve Board grouping.

## COST OF LIVING

## **Changes in Cost of Living in the United States**

THE cost of living in the United States in June, 1927, was 1.3 per cent lower than in December preceding and 0.8 per cent less than in June, 1926, according to the data compiled by the Bureau of Labor Statistics in its semi-annual survey of cost of living in various cities. These data, together with the data that have been given in previous reports, are shown in the tables following. The information is based on actual prices secured from merchants and dealers for each of the periods named. The prices of food and of fuel and light (which include coal, wood, gas, electricity, and kerosene) are furnished the bureau in accordance with arrangements made with establishments through personal visits of the bureau's agents. In each city food prices are secured from 15 to 25 merchants and dealers, and fuel and light prices from 10 to 15 firms, including public utilities. All other data are secured by special agents of the bureau who visit the various merchants, dealers, and agents and secure the figures directly from their records. Four quotations are secured in each city (except in Greater New York, where five are obtained) on each of a large number of articles of clothing, furniture, and miscellaneous items. The number of houses and apartments for which basic rental figures are shown vary in the different cities approximately in proportion to population, the number per city, in round numbers, ranging from 400 to 2,200.

In Table 1 are given index numbers, with 1913 as the base or 100, showing changes in the total cost of living in the United States from 1913 to June, 1927.

TABLE 1.—INDEX NUMBERS SHOWING CHANGES IN COST OF LIVING IN THE  
UNITED STATES, 1913 TO JUNE, 1927

Date	Index numbers	Date	Index numbers	Date	Index numbers
Average, 1913	100.0	May, 1921	180.4	December, 1923	173.2
December, 1914	103.0	September, 1921	177.3	March, 1924	170.4
December, 1915	105.1	December, 1921	174.3	June, 1924	169.1
December, 1916	118.3	March, 1922	166.9	September, 1924	170.6
December, 1917	142.4	June, 1922	166.6	December, 1924	172.5
December, 1918	174.4	September, 1922	166.3	June, 1925	173.5
June, 1919	177.3	December, 1922	169.5	December, 1925	177.9
December, 1919	199.3	March, 1923	168.8	June, 1926	174.8
June, 1920	216.5	June, 1923	169.7	December, 1926	175.6
December, 1920	200.4	September, 1923	172.1	June, 1927	173.4

Table 2 shows the per cent of change in cost of living from June, 1920, June, 1926, and December, 1926, respectively, to June, 1927, in 32 cities, and in the United States, as determined by a consolidation of the figures for the 32 cities.

In the period from June, 1920, which represents the peak, to June, 1927, all of the 32 cities show decreases ranging from 15.0 to 24.5 per cent, the average being 19.9 per cent.

TABLE 2.—PER CENT OF CHANGE IN COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, JUNE, 1926, AND DECEMBER, 1926, TO JUNE, 1927

City	Per cent of increase (+) or decrease (-) from—			City	Per cent of increase (+) or decrease (-) from—		
	June, 1920, to June, 1927	June, 1926, to June, 1927	December, 1926, to June, 1927		June, 1920, to June, 1927	June, 1926, to June, 1927	December, 1926, to June, 1927
Atlanta.....	-20.8	-0.9	-1.0	New Orleans.....	-15.2	+0.2	-1.2
Baltimore.....	-18.2	-1.7	-1.8	New York.....	-18.9	-.5	-1.3
Birmingham.....	-19.1	-2.3	-2.5	Norfolk.....	-21.7	+.5	-.4
Boston.....	-20.2	-8	-2.2	Philadelphia.....	-16.6	-1.4	-2.4
Buffalo.....	-18.8	-1.6	-2.1	Pittsburgh.....	-15.9	-.6	-1.4
Chicago.....	-17.5	-.4	-1.1	Portland, Me.....	-19.7	-.3	-1.4
Cincinnati.....	-16.2	+.6	-.4	Portland, Oreg.....	-23.3	-.6	-.9
Cleveland.....	-18.2	-.9	-.7	Richmond.....	-18.4	-1.9	-1.6
Denver.....	-21.2	-1.1	-1.7	St. Louis.....	-17.3	-.7	-1.0
Detroit.....	-22.6	-1.1	-.8	San Francisco.....	-18.1	-.1	-.7
Houston.....	-21.6	-1.7	-2.5	Savannah.....	-24.4	-1.4	-1.4
Indianapolis.....	-19.2	-.4	-.7	Scranton.....	-15.4	-.6	-1.2
Jacksonville.....	-18.8	-3.4	-3.1	Seattle.....	-19.4	+.2	+.4
Kansas City.....	-24.5	-2.2	-1.0	Washington.....	-20.3	-3.0	-3.3
Los Angeles.....	-15.0	+.2	-.4	Average, United States.....	-19.9	-.8	-1.3
Memphis.....	-19.3	-1.5	-1.5				
Minneapolis.....	-18.3	-2.0	-.8				
Mobile.....	-20.1	-.5	-1.7				

Table 3 shows the changes in each item of expenditure in 19 cities from December, 1914, to June, 1927. Figures for certain months are omitted from Tables 3 and 4 to curtail space.

In studying this and the following tables it should be borne in mind that the figures for the 19 cities in Table 3 are based on the prices prevailing in December, 1914, the figures for the 13 cities in Table 4 are based on the prices prevailing in December, 1917, while the figures for the United States, shown in Table 5, are a summarization of the figures in Tables 3 and 4, computed on a 1913 base.

TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927  
Baltimore, Md.

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915	14.1	2.7	10.2	0.5	5.6	11.4	11.4
December, 1916	20.9	24.0	.9	9.1	26.4	18.5	18.5
December, 1917	64.4	52.1	3.0	25.5	60.8	51.3	51.3
December, 1918	96.4	107.7	13.8	46.0	122.3	78.7	84.7
June, 1919	91.1	128.9	16.8	37.1	134.6	82.8	84.0
December, 1919	92.5	177.4	25.8	48.1	167.0	99.4	98.4
June, 1920	110.9	191.3	41.6	57.6	191.8	111.4	114.2
December, 1920	75.6	159.5	49.5	79.0	181.9	112.9	96.8
May, 1921	43.4	123.2	63.0	70.9	147.5	111.8	77.4
December, 1921	46.9	88.6	64.7	85.5	123.7	108.6	73.2
June, 1922	39.9	78.9	65.4	84.8	113.3	104.4	67.6
December, 1922	46.1	80.5	66.9	94.9	116.6	102.6	70.9
June, 1923	46.5	81.4	69.6	91.6	127.5	103.8	72.0
December, 1923	50.6	81.8	71.9	93.5	130.2	105.2	74.8
June, 1924	44.0	78.3	72.4	84.8	129.4	109.9	71.9
December, 1924	53.0	76.2	72.2	88.7	125.7	107.1	74.8
June, 1925	57.7	76.0	72.0	85.3	122.8	111.0	77.3
December, 1925	66.2	76.2	72.2	90.9	122.1	111.6	81.2
June, 1926	62.2	73.0	71.3	89.8	112.8	111.2	78.4
December, 1926	63.0	72.5	70.6	87.3	110.5	112.3	78.6
June, 1927	56.7	71.3	69.9	82.2	106.9	112.9	75.3

## Boston, Mass.

December, 1915	10.3	6.6	10.1	1.1	8.4	1.6	1.6
December, 1916	18.0	21.9	.1	10.5	26.3	15.7	15.7
December, 1917	45.8	47.5	1.1	29.2	58.4	38.1	38.1
December, 1918	74.9	117.5	2.8	56.6	137.6	62.0	70.6
June, 1919	67.9	137.9	5.1	55.0	153.7	64.8	72.8
December, 1919	80.8	192.4	12.2	63.2	198.7	81.1	92.8
June, 1920	105.0	211.1	16.2	83.6	233.7	91.8	110.7
December, 1920	74.4	192.7	25.8	106.0	226.4	96.6	97.4
May, 1921	41.9	150.3	29.8	97.8	171.2	96.2	74.4
December, 1921	50.4	106.3	33.8	98.5	136.9	93.0	70.2
June, 1922	32.5	96.7	34.4	92.5	124.2	89.5	59.6
December, 1922	44.9	92.0	36.7	99.9	133.6	87.8	65.1
June, 1923	39.7	93.0	40.2	88.8	150.5	89.2	63.5
December, 1923	48.8	92.6	47.0	97.0	148.2	93.0	69.4
June, 1924	37.9	91.2	50.7	90.7	136.9	88.0	63.2
December, 1924	47.8	89.1	52.4	93.7	138.1	85.9	67.3
June, 1925	44.5	88.9	52.9	90.4	136.9	86.3	65.8
December, 1925	60.6	87.8	54.0	107.2	136.7	91.0	74.7
June, 1926	51.5	85.9	53.2	94.4	133.1	91.0	69.4
December, 1926	56.6	85.3	53.5	98.7	129.6	92.3	71.9
June, 1927	50.5	82.9	53.2	92.5	125.5	91.5	68.1

## Buffalo, N. Y.

December, 1915	2.4	8.9	1.2	1.3	7.1	3.5	3.5
December, 1916	30.1	29.6	4.7	9.3	24.1	24.4	24.4
December, 1917	64.1	58.5	9.4	23.5	50.2	51.1	51.1
December, 1918	87.8	123.1	20.7	49.3	106.3	76.0	80.9
June, 1919	82.9	140.7	28.0	51.9	118.1	78.7	84.2
December, 1919	94.7	190.8	29.0	55.7	165.4	90.3	102.7
June, 1920	115.7	210.6	46.6	69.8	199.7	101.9	121.5
December, 1920	78.5	168.7	48.5	74.9	189.2	107.4	101.7
May, 1921	37.7	131.6	61.1	73.9	151.3	107.8	80.3
December, 1921	50.8	96.5	61.7	79.7	124.7	103.0	76.8
June, 1922	38.5	83.6	64.7	78.8	108.0	97.9	68.6
December, 1922	48.8	81.4	64.9	115.7	112.8	97.5	73.9
June, 1923	41.6	83.4	70.0	119.1	127.9	100.5	74.1
December, 1923	51.9	83.8	71.8	120.4	127.5	102.5	78.6
June, 1924	39.5	81.7	76.3	116.6	121.0	101.9	73.9
December, 1924	51.6	79.9	76.8	117.9	121.0	100.9	77.8
June, 1925	52.0	80.3	79.1	115.5	119.5	107.7	79.7
December, 1925	66.5	79.8	79.5	117.9	118.2	107.9	84.8
June, 1926	60.9	76.7	78.1	127.3	113.6	110.6	82.8
December, 1926	63.6	74.6	77.4	127.1	110.2	112.5	83.6
June, 1927	56.7	72.2	75.8	126.9	106.2	111.4	70.8

<sup>1</sup> Decrease.

## CHANGES IN COST OF LIVING

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TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

Chicago, Ill.

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915	2.7	7.5	10.1	10.9	5.9	3.0	3.0
December, 1916	25.2	24.2	7	6.6	20.0	19.5	19.5
December, 1917	53.4	50.6	1.4	19.3	47.5	41.8	41.8
December, 1918	78.7	138.9	2.6	37.1	108.9	58.7	72.2
June, 1919	73.3	157.1	8.0	35.7	126.9	61.7	74.5
December, 1919	93.1	224.0	14.0	40.1	176.0	84.3	100.6
June, 1920	120.0	205.3	35.1	62.4	215.9	87.5	114.6
December, 1920	70.5	158.6	48.9	83.5	205.8	96.5	93.3
May, 1921	41.9	122.7	78.2	65.3	162.4	98.5	78.4
December, 1921	48.3	74.3	83.9	69.4	133.7	94.5	72.3
June, 1922	41.6	63.0	87.4	55.4	108.5	87.9	65.0
December, 1922	44.8	67.5	88.9	65.6	120.4	86.7	68.0
June, 1923	45.1	72.2	92.1	54.9	133.1	87.7	69.6
December, 1923	52.5	70.0	95.4	59.3	132.9	88.1	83.7
June, 1924	47.9	72.6	104.4	53.0	122.2	90.7	72.6
December, 1924	56.2	67.8	105.8	56.1	121.9	90.7	75.3
June, 1925	61.4	65.8	105.6	53.9	118.1	93.9	77.1
December, 1925	69.4	65.3	104.4	65.8	118.5	93.9	80.6
June, 1926	67.2	62.7	99.5	55.4	112.4	94.3	77.8
December, 1926	69.6	61.9	96.7	64.4	109.2	95.7	79.0
June, 1927	68.2	58.7	93.9	57.2	105.2	96.7	77.1

## Cleveland, Ohio

December, 1915	1.4	2.0	0.1	0.3	4.7	1.4	1.4
December, 1916	26.4	18.0	.9	10.0	19.7	19.1	19.1
December, 1917	54.3	43.7	11.3	26.8	47.8	42.9	42.9
December, 1918	79.4	102.6	16.5	51.9	102.4	67.1	71.4
June, 1919	79.7	125.2	21.8	47.9	117.0	74.7	77.2
December, 1919	92.9	171.2	39.9	62.9	165.5	85.9	98.2
June, 1920	118.7	185.1	47.3	90.3	186.5	117.9	120.3
December, 1920	71.7	156.0	80.0	94.5	176.8	134.0	107.3
May, 1921	37.4	124.0	88.1	89.6	133.6	129.6	87.5
December, 1921	40.9	85.8	81.2	103.8	100.8	123.2	78.8
June, 1922	34.6	72.4	69.6	102.2	87.8	110.7	68.9
December, 1922	41.1	70.9	74.0	116.3	104.8	109.4	72.9
June, 1923	42.1	77.6	73.8	151.6	129.6	108.1	77.1
December, 1923	43.6	79.6	78.7	147.0	129.3	113.1	79.6
June, 1924	37.2	78.4	77.7	142.6	118.0	112.7	75.9
December, 1924	46.2	72.9	78.6	144.1	113.4	112.1	78.1
June, 1925	53.8	71.9	76.8	143.9	111.9	112.3	80.4
December, 1925	58.3	71.9	75.6	168.8	113.4	111.5	82.7
June, 1926	60.0	70.7	71.6	162.3	106.1	111.9	81.9
December, 1926	58.7	68.3	71.8	170.7	105.3	112.7	81.5
June, 1927	56.6	67.5	67.5	163.9	108.2	115.9	80.2

## Detroit, Mich.

December, 1915	4.1	2.3	2.1	1.6	8.7	3.5	3.5
December, 1916	26.5	18.9	17.5	9.9	24.5	22.3	22.3
December, 1917	59.7	46.7	32.6	30.2	50.4	49.9	49.9
December, 1918	82.5	113.8	39.0	47.6	107.3	72.6	78.0
June, 1919	86.4	125.2	45.2	47.6	129.3	80.3	84.4
December, 1919	90.5	181.8	60.2	57.9	172.6	100.1	107.9
June, 1920	132.0	208.8	68.8	74.9	206.7	141.3	136.0
December, 1920	75.6	176.1	108.1	104.5	184.0	144.0	118.6
May, 1921	41.1	134.1	101.4	83.6	134.0	140.1	93.3
December, 1921	47.3	92.5	91.1	77.5	96.8	130.7	82.4
June, 1922	43.1	81.4	86.9	75.2	76.0	121.3	75.3
December, 1922	44.8	79.9	92.1	95.5	81.1	121.5	79.4
June, 1923	46.7	84.0	96.9	87.3	105.7	124.2	81.7
December, 1923	47.5	85.3	107.5	84.9	105.3	128.4	84.7
June, 1924	45.5	82.3	105.6	81.8	103.4	127.2	82.8
December, 1924	49.7	76.1	103.8	82.7	98.1	125.4	82.2
June, 1925	60.6	75.2	98.7	78.9	94.1	124.7	84.5
December, 1925	68.1	74.8	97.7	101.1	93.7	122.5	87.8
June, 1926	65.7	73.4	95.5	76.4	91.8	122.5	84.7
December, 1926	63.8	71.0	95.5	86.8	88.7	121.6	84.1
June, 1927	65.2	68.3	89.6	73.4	86.8	125.1	82.7

<sup>1</sup> Decrease.

TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

*Houston, Tex.*

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915	11.0	2.7	12.3	10.9	6.1	10.3	10.3
December, 1916	19.9	25.0	17.3	8.3	39.6	16.4	16.4
December, 1917	57.3	51.5	17.7	22.7	62.3	44.9	44.9
December, 1918	86.1	117.3	11.7	47.5	119.9	67.6	73.7
June, 1919	85.7	134.8	1.9	37.6	144.5	72.3	90.2
December, 1919	97.5	192.0	13.4	60.0	181.8	88.2	101.7
June, 1920	107.5	211.3	25.3	55.1	213.9	90.4	112.2
December, 1920	83.2	187.0	35.1	74.2	208.2	103.9	104.0
May, 1921	45.6	143.4	39.4	46.0	173.7	100.8	79.7
December, 1921	50.1	104.9	39.8	39.4	148.2	99.0	73.6
June, 1922	38.9	98.4	38.5	32.9	133.7	94.0	65.9
December, 1922	45.0	98.2	37.3	39.2	140.4	98.0	68.4
June, 1923	41.2	100.4	36.7	36.5	150.2	91.5	67.2
December, 1923	46.4	102.6	36.4	55.8	148.2	98.2	70.6
June, 1924	37.3	100.8	34.9	45.0	143.7	89.5	65.0
December, 1924	54.4	95.6	34.7	44.3	143.0	88.0	70.5
June, 1925	57.3	95.6	34.3	38.7	142.5	87.8	71.1
December, 1925	65.8	92.5	33.0	45.2	143.2	88.0	74.8
June, 1926	55.0	91.2	32.9	35.2	138.6	87.4	69.1
December, 1926	59.8	88.9	32.6	43.7	137.9	88.0	70.6
June, 1927	50.4	86.8	32.2	32.8	136.7	86.6	66.8

*Jacksonville, Fla.*

December, 1915	10.3	10.5	16.9	(2)	15.1	1.3	1.3
December, 1916	17.6	33.7	18.2	2.3	43.4	14.7	14.7
December, 1917	50.8	71.9	18.7	15.1	73.7	41.6	41.6
December, 1918	76.2	130.5	5.9	55.2	126.5	60.5	71.5
June, 1919	74.2	139.8	9.7	49.2	140.0	65.9	77.5
December, 1919	80.9	217.2	22.0	64.1	186.2	80.9	101.6
June, 1920	90.1	234.0	28.9	72.6	224.2	102.8	116.5
December, 1920	65.6	209.3	34.1	92.6	222.3	105.6	106.2
May, 1921	32.6	167.5	36.5	80.7	182.7	107.5	85.8
December, 1921	40.6	117.9	38.3	68.9	134.9	99.3	75.1
June, 1922	30.6	99.9	35.3	58.9	115.3	95.5	65.7
December, 1922	34.8	99.3	35.1	65.7	127.1	94.7	67.8
June, 1923	32.0	101.1	34.3	63.6	137.9	95.3	67.7
December, 1923	39.9	104.5	33.4	75.1	139.4	96.6	71.9
June, 1924	30.2	102.7	33.0	72.1	132.9	95.0	67.3
December, 1924	40.0	94.6	33.5	72.9	132.4	99.1	70.4
June, 1925	41.8	94.0	33.5	69.3	134.0	99.3	70.9
December, 1925	58.3	93.6	55.3	87.1	135.6	105.3	81.7
June, 1926	53.4	93.4	66.6	95.3	134.7	105.5	81.8
December, 1926	53.5	90.9	60.9	91.2	128.1	105.7	81.3
June, 1927	45.0	88.0	57.2	87.8	126.0	104.5	75.7

*Los Angeles, Calif.*

December, 1915	14.1	2.8	12.7	0.4	6.3	11.9	11.9
December, 1916	.4	14.3	12.5	2.3	23.1	7.7	7.7
December, 1917	33.4	45.0	1.6	10.4	56.4	28.9	28.9
December, 1918	61.8	109.1	4.4	18.3	118.5	52.0	58.0
June, 1919	60.7	123.3	8.7	18.6	134.2	59.1	65.1
December, 1919	71.0	167.6	26.8	35.3	175.5	76.9	85.3
June, 1920	90.8	184.5	42.6	53.5	202.2	86.6	101.7
December, 1920	62.7	166.6	71.4	53.5	202.2	100.6	96.7
May, 1921	33.2	127.4	85.3	52.7	156.6	96.8	78.7
December, 1921	38.4	94.3	90.1	52.7	143.2	99.6	76.4
June, 1922	30.6	81.3	95.6	39.1	128.8	103.8	72.5
December, 1922	39.4	78.0	94.8	35.6	138.1	101.2	74.6
June, 1923	36.2	82.5	97.7	33.7	133.6	100.8	75.1
December, 1923	42.1	83.0	100.9	34.1	152.0	104.2	78.8
June, 1924	35.2	81.4	99.4	33.6	136.1	105.4	75.1
December, 1924	38.8	80.4	93.3	34.4	137.7	104.2	75.4
June, 1925	44.1	79.0	83.6	34.0	133.9	108.9	76.9
December, 1925	48.7	77.7	73.7	34.4	133.7	110.6	77.4
June, 1926	39.9	75.7	67.4	34.1	126.7	104.7	71.2
December, 1926	44.7	75.2	61.7	34.8	123.8	105.7	72.2
June, 1927	40.4	74.0	59.9	61.0	120.4	108.2	71.5

<sup>1</sup> Decrease.<sup>2</sup> No change.

## CHANGES IN COST OF LIVING

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TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

## Mobile, Ala.

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915.	11.0	2.0	11.9	(?)	4.1	10.4	10.4
December, 1916.	19.9	9.0	14.3	8.8	15.3	13.8	13.8
December, 1917.	57.3	38.8	13.6	27.1	42.8	43.2	43.2
December, 1918.	80.6	86.0	11.2	57.1	108.3	72.4	71.4
June, 1919.	83.6	94.0	11.9	66.6	113.9	75.3	76.6
December, 1919.	98.4	123.7	29.6	75.6	153.3	87.0	94.5
June, 1920.	110.5	137.4	34.6	86.3	177.9	100.3	107.0
December, 1920.	73.5	122.2	53.6	122.3	175.4	100.7	93.3
May, 1921.	39.1	90.6	53.3	102.1	140.7	96.9	70.8
December, 1921.	42.4	57.7	49.9	98.2	116.9	94.3	63.6
June, 1922.	33.2	49.7	47.7	84.4	97.8	87.5	55.3
December, 1922.	39.1	50.8	43.8	96.4	97.9	91.0	58.8
June, 1923.	37.7	51.8	42.5	93.3	114.0	89.8	58.6
December, 1923.	44.7	55.4	42.6	98.1	114.8	91.3	62.6
June, 1924.	33.4	54.3	41.4	91.4	109.3	93.7	58.0
December, 1924.	49.7	53.4	40.9	90.2	107.2	94.3	63.9
June, 1925.	50.3	52.0	40.1	85.6	104.3	95.5	63.9
December, 1925.	59.0	49.4	40.4	89.1	103.7	102.0	68.5
June, 1926.	53.1	49.5	39.7	94.6	100.8	102.2	66.2
December, 1926.	58.0	48.8	40.5	97.7	96.4	102.2	68.1
June, 1927.	52.0	47.6	40.4	91.8	97.2	102.4	65.3

## New York, N. Y.

December, 1915.	1.3	4.8	10.1	10.1	8.4	2.0	2.0
December, 1916.	16.3	22.3	1.1	11.0	27.6	14.9	14.9
December, 1917.	55.3	54.2	2.6	19.9	56.5	44.7	44.7
December, 1918.	82.6	131.3	6.5	45.5	126.5	70.0	77.3
June, 1919.	75.3	151.6	13.4	45.4	136.6	75.1	79.2
December, 1919.	91.0	219.7	23.4	50.6	172.9	95.8	103.8
June, 1920.	105.3	241.4	32.4	60.1	205.1	111.9	119.2
December, 1920.	73.5	201.8	38.1	87.5	185.9	116.3	101.4
May, 1921.	42.5	159.5	42.2	95.9	156.5	117.6	81.7
December, 1921.	51.8	117.8	53.7	90.7	132.0	116.9	79.3
June, 1922.	40.0	103.0	55.7	89.0	118.3	112.8	70.7
December, 1922.	49.5	98.3	56.7	95.7	121.6	111.6	74.2
June, 1923.	44.4	100.7	59.4	89.1	130.3	110.8	72.6
December, 1923.	52.0	102.7	62.4	94.2	131.5	113.5	77.3
June, 1924.	41.1	100.7	64.5	88.8	121.4	115.0	72.5
December, 1924.	50.0	97.7	67.1	93.3	119.4	116.7	76.5
June, 1925.	48.9	97.5	67.8	91.0	110.6	116.9	75.8
December, 1925.	62.6	95.9	69.5	126.0	110.4	118.2	83.2
June, 1926.	56.0	94.7	69.5	95.9	106.6	117.3	78.6
December, 1926.	59.1	93.7	70.2	96.1	106.0	117.5	80.0
June, 1927.	54.0	92.9	70.2	91.4	102.5	119.0	77.7

## Norfolk, Va.

December, 1915.	0.8	0.8	0.1	(?)	0.6	0.6	0.6
December, 1916.	22.4	6.0	1.1	17.0	8.7	14.7	14.7
December, 1917.	63.9	31.6	1.1	33.3	40.0	45.2	45.2
December, 1918.	86.2	94.6	39.0	74.6	105.5	76.8	80.7
June, 1919.	89.8	104.8	46.5	69.7	110.7	83.7	87.1
December, 1919.	91.5	158.4	63.3	89.9	143.6	97.5	107.0
June, 1920.	107.6	176.5	70.8	110.6	165.0	108.4	122.2
December, 1920.	76.3	153.6	90.8	128.9	160.5	106.3	109.0
May, 1921.	45.4	121.6	94.6	97.3	129.0	106.3	88.1
December, 1921.	43.4	90.2	93.4	91.6	106.1	109.3	79.2
June, 1922.	33.5	77.6	88.1	87.7	88.4	100.8	69.5
December, 1922.	38.6	73.2	77.2	106.5	89.1	99.6	69.9
June, 1923.	36.9	79.1	73.0	102.1	101.0	102.2	71.1
December, 1923.	40.7	80.8	67.0	96.9	103.8	104.4	72.4
June, 1924.	33.1	78.6	64.2	94.4	100.1	103.0	68.4
December, 1924.	46.0	75.4	59.4	99.1	102.1	103.4	72.1
June, 1925.	47.9	74.7	58.4	96.7	96.0	103.4	71.9
December, 1925.	60.8	74.0	53.0	107.9	96.8	103.8	76.4
June, 1926.	56.0	73.0	52.1	102.1	93.7	100.5	73.1
December, 1926.	58.7	72.8	49.2	109.6	90.4	103.7	74.6
June, 1927.	54.7	71.1	45.9	96.8	88.9	114.9	73.9

<sup>1</sup> Decrease.<sup>2</sup> No change.

TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

## Philadelphia, Pa.

Date	Per cent of increase over December, 1914, in expenditure for						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915	0.3	3.6	10.3	10.8	6.9	1.2	1.1
December, 1916	18.9	16.0	1.7	5.4	19.9	14.7	14.7
December, 1917	54.4	51.3	2.6	21.5	49.8	43.8	43.8
December, 1918	80.7	111.2	8.0	47.9	107.7	67.5	71.1
June, 1919	75.5	135.9	11.3	43.3	117.8	71.2	71.1
December, 1919	87.2	190.3	16.7	51.3	162.8	88.6	88.6
June, 1920	101.7	219.6	28.6	66.8	187.4	102.8	102.8
December, 1920	68.1	183.5	38.0	96.0	183.4	122.3	122.3
May, 1921	37.8	144.7	44.2	85.6	135.5	119.2	119.2
December, 1921	43.9	104.6	48.1	92.0	101.6	116.2	116.2
June, 1922	38.1	89.5	49.6	85.7	90.0	112.3	112.3
December, 1922	43.4	87.6	52.9	93.0	96.9	110.7	110.7
June, 1923	42.7	87.6	58.1	89.9	110.8	112.4	112.4
December, 1923	45.1	88.2	60.9	102.2	111.6	112.0	112.0
June, 1924	39.3	85.5	72.4	91.7	102.3	110.7	110.7
December, 1924	46.4	84.4	75.3	94.8	100.5	117.6	117.6
June, 1925	51.3	83.8	76.0	87.0	98.9	117.6	117.6
December, 1925	62.0	83.8	77.1	100.5	97.9	117.6	117.6
June, 1926	56.6	82.5	77.1	98.3	93.7	120.6	120.6
December, 1926	61.2	80.3	77.3	98.5	92.3	121.5	121.5
June, 1927	53.8	79.2	75.3	89.4	88.6	120.8	120.8

## Portland, Me.

December, 1915	12.0	2.1	0.2	0.4	6.2	10.4	10.4
December, 1916	18.6	9.7	.6	11.4	20.9	13.8	13.8
December, 1917	49.8	32.8	2.4	28.9	43.5	38.0	38.0
December, 1918	86.8	85.8	2.5	67.7	110.8	65.6	72.1
June, 1919	80.6	103.8	5.7	58.4	126.4	72.1	74.1
December, 1919	91.9	148.5	10.7	60.8	163.7	83.2	91.6
June, 1920	114.5	165.0	14.5	83.9	190.3	80.4	107.4
December, 1920	78.7	147.8	20.0	113.5	191.2	94.3	93.1
May, 1921	46.7	116.3	23.1	96.8	152.2	94.1	72.1
December, 1921	54.8	88.1	26.6	94.0	123.6	91.2	60.2
June, 1922	39.9	76.7	24.8	96.1	108.1	88.2	50.7
December, 1922	49.1	74.8	30.7	94.7	114.2	88.0	64.1
June, 1923	45.3	77.3	27.3	94.0	129.7	88.0	63.3
December, 1923	52.3	76.6	31.7	100.0	130.2	89.3	66.1
June, 1924	44.1	74.5	27.4	96.2	126.7	87.9	62.4
December, 1924	52.4	75.0	28.8	99.6	126.0	87.2	60.0
June, 1925	52.2	75.0	25.1	95.8	126.0	87.8	65.2
December, 1925	64.5	74.0	24.4	100.3	126.9	87.6	70.3
June, 1926	58.7	71.7	23.7	100.5	121.7	88.4	67.3
December, 1926	63.3	70.3	23.8	102.9	120.8	88.6	69.1
June, 1927	59.4	67.6	23.6	98.6	118.8	88.6	66.8

## Portland, Oreg.

December, 1915	13.8	3.0	10.9	11.0	2.9	3.1	3.1
December, 1916	9.8	15.8	19.6	3.4	18.0	6.1	6.1
December, 1917	42.2	44.4	12.2	20.2	54.5	31.2	31.2
December, 1918	70.6	96.6	12.3	30.9	109.0	57.9	64.2
June, 1919	67.1	115.5	20.2	31.3	122.1	62.3	60.2
December, 1919	81.6	142.1	27.7	42.3	145.1	71.6	83.7
June, 1920	107.1	158.6	33.2	46.9	183.9	79.7	100.4
December, 1920	60.9	122.1	36.9	65.9	179.9	81.1	80.3
May, 1921	26.0	91.2	42.9	67.1	148.0	81.1	62.2
December, 1921	33.1	65.3	43.3	59.4	121.9	80.0	58.3
June, 1922	26.5	53.2	43.3	50.3	101.9	78.5	52.1
December, 1922	34.3	54.9	43.6	65.7	102.9	70.4	56.1
June, 1923	29.5	61.3	42.5	61.3	109.8	75.8	54.6
December, 1923	35.1	61.8	42.7	67.1	109.0	79.6	57.8
June, 1924	28.5	61.1	43.3	55.5	102.2	73.0	52.8
December, 1924	36.1	50.2	42.9	62.4	102.2	74.4	55.8
June, 1925	40.6	57.6	40.9	52.2	98.6	73.0	55.8
December, 1925	43.2	57.0	40.1	60.0	100.6	73.0	56.9
June, 1926	38.6	56.5	37.9	50.9	95.2	74.2	54.0
December, 1926	40.6	54.0	33.5	61.2	90.7	76.6	55.1
June, 1927	39.2	53.2	30.3	56.9	87.8	76.4	53.7

<sup>1</sup> Decrease.

## CHANGES IN COST OF LIVING

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TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

*San Francisco and Oakland, Calif.*

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915.	14.3	2.5	10.7	10.1	6.0	1.7	11.7
December, 1916.	9.6	14.5	12.5	4.6	21.7	8.3	8.3
December, 1917.	35.9	43.6	14.0	14.4	48.2	28.6	28.6
December, 1918.	66.2	100.0	13.9	30.1	103.4	50.5	57.8
June, 1919.	63.3	134.6	13.5	28.9	116.6	61.0	65.6
December, 1919.	74.2	170.4	4.7	41.3	143.8	74.7	87.8
June, 1920.	93.9	191.0	9.4	47.2	180.1	79.6	96.0
December, 1920.	64.9	175.9	15.0	66.3	175.6	84.8	85.1
May, 1921.	33.3	140.9	21.7	63.3	143.9	84.4	66.7
December, 1921.	40.4	106.3	25.8	65.3	113.9	86.8	63.6
June, 1922.	31.1	90.7	29.4	59.5	104.4	83.7	56.8
December, 1922.	38.8	85.4	30.0	52.5	105.4	84.2	58.8
June, 1923.	34.2	92.1	33.4	42.6	116.7	79.4	57.6
December, 1923.	42.3	94.4	36.0	48.8	116.9	81.2	62.1
June, 1924.	35.0	91.5	38.0	49.9	113.4	73.2	57.3
December, 1924.	42.1	90.5	39.4	53.5	114.7	72.7	60.1
June, 1925.	47.6	90.5	40.1	54.3	115.1	72.9	62.2
December, 1925.	53.3	89.7	40.0	50.8	115.7	74.6	64.7
June, 1926.	44.3	88.4	39.6	48.5	105.6	75.3	60.7
December, 1926.	48.3	85.6	39.5	51.0	104.6	75.3	61.7
June, 1927.	45.4	83.7	38.7	47.1	103.8	77.8	60.5

*Savannah, Ga.*

December, 1915.	10.3	0.8	11.4	11.3	1.8	10.2	10.2
December, 1916.	17.6	24.1	13.0	11.7	12.8	14.5	14.6
December, 1917.	50.8	56.6	14.3	21.1	50.7	42.5	42.5
December, 1918.	76.2	133.6	5.9	37.5	128.6	67.3	75.0
June, 1919.	74.2	146.3	10.2	35.5	136.5	71.2	79.8
December, 1919.	80.9	195.9	22.0	52.2	182.1	82.0	98.7
June, 1920.	91.7	212.1	33.5	65.3	207.2	83.8	100.4
December, 1920.	63.5	171.5	58.6	94.4	206.6	91.5	98.7
May, 1921.	28.7	133.2	61.9	74.2	175.9	93.0	77.6
December, 1921.	33.7	84.2	60.9	66.1	133.7	87.4	66.2
June, 1922.	22.7	71.7	57.8	55.2	120.1	81.1	56.8
December, 1922.	27.6	76.2	52.7	68.3	123.8	79.5	59.2
June, 1923.	22.6	81.2	49.5	61.9	135.9	77.5	57.9
December, 1923.	25.0	80.9	47.5	64.1	133.4	76.7	58.2
June, 1924.	17.5	79.1	45.3	59.7	130.6	77.5	54.8
December, 1924.	25.1	75.8	41.0	62.2	128.7	77.5	56.3
June, 1925.	31.5	75.1	39.7	59.1	128.2	77.5	57.9
December, 1925.	44.9	73.7	38.6	62.9	128.9	79.1	62.9
June, 1926.	39.1	73.7	38.0	61.9	126.6	79.5	60.6
December, 1926.	39.7	72.0	38.1	68.4	123.9	79.0	60.5
June, 1927.	35.4	60.8	37.7	58.3	121.7	80.6	58.3

*Seattle, Wash.*

December, 1915.	12.8	1.2	12.4	10.2	8.5	1.0	1.0
December, 1916.	8.5	11.3	15.4	2.9	27.4	7.4	7.4
December, 1917.	38.7	36.4	1.6	23.9	52.3	31.1	31.1
December, 1918.	72.5	88.0	44.3	51.8	141.5	58.5	60.9
June, 1919.	69.3	110.2	51.5	51.8	154.4	71.4	76.9
December, 1919.	80.9	154.5	71.5	63.8	201.0	86.8	97.7
June, 1920.	102.3	173.9	74.8	65.8	221.2	90.4	110.5
December, 1920.	54.1	160.5	76.7	78.7	216.4	95.5	94.1
May, 1921.	27.1	128.7	74.8	78.7	177.2	105.5	80.2
December, 1921.	30.5	88.7	69.2	66.0	149.9	102.6	71.5
June, 1922.	30.0	78.0	64.7	64.0	137.3	97.6	67.0
December, 1922.	33.9	74.2	63.1	59.6	136.1	96.4	66.7
June, 1923.	31.0	76.7	62.3	58.0	143.9	96.6	66.4
December, 1923.	35.8	77.6	62.9	59.1	144.2	96.6	68.5
June, 1924.	33.1	76.2	64.0	56.8	140.7	94.6	66.7
December, 1924.	35.8	74.4	63.7	59.6	141.1	96.4	67.8
June, 1925.	43.7	74.6	64.7	57.8	141.6	96.4	70.5
December, 1925.	47.3	74.8	63.7	58.1	142.1	97.0	71.7
June, 1926.	42.3	74.8	62.6	49.4	139.4	97.0	60.4
December, 1926.	41.6	73.1	60.3	61.2	137.5	97.6	60.1
June, 1927.	43.0	71.9	59.0	59.3	136.8	99.6	60.7

<sup>1</sup> Decrease

TABLE 3.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1927—Continued

Washington, D. C.

Date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1915	0.6	3.7	1 1.5	(2)	6.3	0.4	1.0
December, 1916	15.7	23.2	1 3.7	7.3	30.5	15.3	14.6
December, 1917	61.1	60.1	1 3.4	24.9	72.1	44.3	47.3
December, 1918	90.9	112.6	1 1.5	40.9	127.4	55.9	73.8
April, 1919	84.6	109.5	1 1.4	41.8	126.0	57.4	71.2
November, 1919	93.3	165.9	5.4	42.8	159.3	62.7	87.4
June, 1920	108.4	184.0	15.6	53.7	196.4	68.2	101.3
December, 1920	79.0	151.1	24.7	68.0	194.0	73.9	87.8
May, 1921	47.4	115.9	28.8	57.1	149.0	72.0	67.1
December, 1921	51.1	87.1	30.4	49.9	122.4	75.8	63.0
June, 1922	44.3	77.5	31.4	44.5	108.1	73.7	57.6
December, 1922	49.2	74.8	32.6	55.1	112.6	72.0	59.5
June, 1923	48.8	78.9	33.9	51.2	129.0	72.5	60.9
December, 1923	52.3	81.2	34.3	47.0	128.8	74.9	63.2
June, 1924	43.7	78.9	35.7	42.9	124.5	75.0	59.5
December, 1924	53.6	75.8	36.7	44.9	125.2	76.5	63.1
June, 1925	57.2	75.4	37.7	39.8	119.8	76.5	64.0
December, 1925	65.6	73.5	40.3	48.7	115.0	75.4	67.3
June, 1926	63.3	73.3	38.6	41.7	112.6	75.0	65.5
December, 1926	66.3	70.9	37.4	45.7	107.5	75.0	66.0
June, 1927	55.0	69.2	36.4	39.3	104.4	73.6	60.5

<sup>1</sup> Decrease.<sup>2</sup> No change.

Table 4 shows the changes in the cost of living from December, 1917, to June, 1927, for 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period and in the length of time covered.

TABLE 4.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO JUNE, 1927

Atlanta, Ga.

Date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1918	19.0	29.1	14.0	17.0	24.9	14.8	19.7
June, 1919	18.0	40.7	14.5	17.9	30.1	21.5	23.3
December, 1919	27.9	66.9	32.6	30.8	49.9	31.7	37.9
June, 1920	34.0	80.5	40.4	61.0	65.0	34.6	46.7
December, 1920	12.8	56.5	73.1	66.8	58.4	39.7	38.5
May, 1921	18.9	35.2	78.8	56.1	38.0	40.5	25.2
December, 1921	17.2	8.3	75.4	43.7	23.0	39.7	18.7
June, 1922	1 10.5	.4	68.1	39.1	15.2	34.5	13.7
December, 1922	1 8.9	2.8	62.7	57.6	17.4	34.1	15.1
June, 1923	1 10.3	5.9	61.4	42.7	23.9	32.8	14.2
December, 1923	1 6.3	6.9	62.2	39.3	23.5	33.3	16.0
June, 1924	1 10.2	5.7	60.1	32.0	20.4	33.8	13.6
December, 1924	1 5.5	4.9	56.9	33.1	20.4	33.7	14.9
June, 1925	1 1.2	4.5	55.5	26.2	19.9	34.9	16.2
December, 1925	6.5	4.3	49.3	34.7	18.8	35.6	19.0
June, 1926	4.5	3.9	44.4	36.6	17.4	34.0	17.3
December, 1926	4.3	2.9	42.1	46.0	15.5	33.9	17.4
June, 1927	4.1	2.1	41.5	31.7	14.6	33.9	16.2

<sup>1</sup> Decrease.

TABLE 4.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO JUNE, 1927—Continued

## Birmingham, Ala.

Date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1918.	17.7	23.9	8.1	22.8	19.4	13.8	17.0
June, 1919.	18.3	20.8	12.8	31.9	20.2	16.3	19.8
December, 1919.	26.5	57.6	34.9	39.8	45.1	26.8	34.3
June, 1920.	36.4	66.4	40.3	55.3	55.6	28.7	41.9
December, 1920.	11.9	45.1	68.5	74.2	48.1	30.4	33.3
May, 1921.	19.1	24.8	77.4	54.3	32.0	33.8	22.1
December, 1921.	18.5	1.4	79.9	44.1	12.0	35.5	16.2
June, 1922.	13.1	16.1	67.0	25.0	3.3	30.4	10.7
December, 1922.	19.9	11.7	62.3	49.9	8.9	29.6	13.2
June, 1923.	19.9	1.8	63.1	40.7	17.8	28.5	13.6
December, 1923.	16.6	3.8	67.9	50.2	19.7	27.2	16.0
June, 1924.	12.6	3.2	68.6	40.5	14.3	27.2	13.1
December, 1924.	13.1	1.6	68.6	45.7	14.9	27.3	16.8
June, 1925.	1.9	1.5	68.3	33.8	15.5	27.2	16.9
December, 1925.	4.5	1.3	68.0	41.4	15.5	27.8	10.2
June, 1926.	1.5	1.9	66.5	41.0	13.5	26.9	17.5
December, 1926.	1.8	11.9	65.8	51.3	12.4	26.9	17.8
June, 1927.	13.1	13.1	64.5	39.6	11.2	26.4	14.8

## Cincinnati, Ohio

December, 1918.	15.3	33.8	0.2	10.0	25.7	20.4	17.3
June, 1919.	18.1	48.3	.8	5.6	30.5	21.8	21.1
December, 1919.	22.9	84.2	12.8	11.0	51.1	40.3	35.2
June, 1920.	38.7	96.7	13.6	26.9	75.5	47.6	47.1
December, 1920.	10.3	73.5	25.0	34.1	66.7	53.4	34.7
May, 1921.	7.4	49.0	27.6	15.7	39.7	52.3	21.7
December, 1921.	8.3	13.9	28.5	42.4	22.3	47.3	15.3
June, 1922.	8.9	4.9	31.0	35.2	15.8	44.0	12.7
December, 1922.	10.4	5.5	35.2	61.0	17.2	42.7	13.8
June, 1923.	9.3	8.8	40.7	51.9	24.3	42.8	15.5
December, 1923.	6.7	9.2	45.6	53.0	26.2	43.3	17.7
June, 1924.	10.2	6.4	49.3	39.3	23.2	46.9	16.3
December, 1924.	8.3	1.5	50.1	44.5	23.2	52.3	17.6
June, 1925.	1.9	1.2	51.2	61.1	23.4	55.0	22.1
December, 1925.	3.9	1.1	51.8	70.4	21.3	49.9	23.0
June, 1926.	2.7	1.2	54.8	62.2	17.7	50.5	22.6
December, 1926.	3.1	1.7	55.9	83.6	16.9	50.5	23.8
June, 1927.	2.9	12.3	56.8	66.7	16.1	50.0	23.3

## Denver, Colo.

December, 1918.	20.0	40.1	12.8	8.1	22.6	14.8	20.7
June, 1919.	20.7	53.2	21.8	8.4	31.3	17.7	25.3
December, 1919.	26.0	82.1	33.5	19.6	46.3	32.3	38.2
June, 1920.	41.5	96.8	51.9	22.3	60.2	35.4	50.3
December, 1920.	7.9	78.3	60.8	47.1	58.9	38.8	38.7
May, 1921.	13.1	53.9	76.9	37.5	42.5	42.8	26.9
December, 1921.	8.8	27.7	82.6	39.7	27.9	43.1	24.5
June, 1922.	14.2	15.3	84.8	32.8	20.4	38.1	18.8
December, 1922.	9.0	16.6	86.0	40.7	21.2	37.6	21.6
June, 1923.	11.5	16.0	86.4	30.4	26.1	37.1	19.9
December, 1923.	8.7	17.9	88.9	37.2	27.0	36.8	22.1
June, 1924.	13.5	16.1	84.4	19.7	23.8	35.1	17.6
December, 1924.	7.8	15.1	84.0	25.4	24.2	35.6	20.2
June, 1925.	5.3	14.5	82.5	27.0	24.8	35.6	21.1
December, 1925.	1.3	13.1	78.5	37.4	25.2	35.6	22.5
June, 1926.	1.8	12.4	71.9	25.3	24.2	35.1	19.7
December, 1926.	2.0	11.8	65.5	38.1	23.5	36.6	20.4
June, 1927.	2.8	10.1	61.2	20.8	22.9	36.1	18.4

<sup>1</sup> Decrease.

TABLE 4.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO JUNE, 1927—Continued

## Indianapolis, Ind.

Date	Per cent of increase over December, 1917, in expenditure for						
	Food	Clothing	Rent	Fuel and light	House- furnishing goods	Miscel- laneous	All items
December, 1918.	17.8	32.4	1.6	19.8	18.9	21.9	19.1
June, 1919.	16.4	40.1	2.6	16.7	24.8	26.8	21.1
December, 1919.	28.2	73.8	11.6	27.3	48.4	38.2	34.3
June, 1920.	49.0	87.9	18.9	45.6	67.5	40.5	50.2
December, 1920.	11.0	72.3	32.9	60.3	63.0	47.5	37.8
May, 1921.	10.1	45.8	37.4	49.4	35.3	47.4	32.9
December, 1921.	8.4	16.2	43.8	42.5	22.5	46.2	29.3
June, 1922.	9.9	7.9	41.3	44.9	13.7	45.4	19.3
December, 1922.	11.1	8.6	44.1	73.4	16.7	46.7	16.4
June, 1923.	8.0	11.6	44.6	54.9	23.2	46.1	19.4
December, 1923.	6.5	13.4	47.1	41.5	24.0	49.2	20.8
June, 1924.	10.0	11.9	46.5	38.2	21.4	51.5	19.3
December, 1924.	4.9	10.4	46.7	41.5	21.5	53.3	21.4
June, 1925.	2.3	9.8	44.1	33.9	20.6	53.8	21.5
December, 1925.	4.4	7.5	41.7	44.9	21.8	54.1	24.2
June, 1926.	2.6	7.4	38.3	33.9	20.6	51.6	21.9
December, 1926.	2.9	5.4	36.5	47.8	19.9	51.8	22.3
June, 1927.	3.5	5.9	34.6	34.6	18.0	52.3	21.4

## Kansas City, Mo.

December, 1918.	17.3	40.7	5.4	18.0	31.1	15.6	19.6
June, 1919.	15.1	44.7	6.7	9.6	37.9	20.8	20.6
December, 1919.	24.5	89.9	26.0	27.5	61.8	31.5	38.2
June, 1920.	44.9	104.5	20.4	35.2	73.0	37.1	51.0
December, 1920.	10.2	76.3	63.9	55.1	68.7	40.3	39.5
May, 1921.	8.3	52.3	65.0	43.3	50.0	40.4	27.3
December, 1921.	6.6	24.1	69.7	42.6	26.2	37.6	22.5
June, 1922.	13.5	15.9	59.4	36.3	11.6	32.3	15.0
December, 1922.	12.0	14.6	61.4	40.2	12.1	33.3	16.3
June, 1923.	12.5	14.5	53.7	36.1	22.5	33.8	15.3
December, 1923.	10.2	15.2	56.8	36.7	22.6	36.2	17.2
June, 1924.	12.7	13.3	49.5	34.5	16.8	35.3	14.3
December, 1924.	7.7	12.0	46.2	32.9	16.1	34.3	15.3
June, 1925.	3.9	11.4	40.6	32.8	15.6	36.4	16.3
December, 1925.	2.0	9.2	39.5	32.3	14.1	36.3	18.0
June, 1926.	.5	8.7	35.9	29.4	12.8	36.3	16.6
December, 1926.	1.7	6.3	34.1	33.5	10.8	36.3	15.2
June, 1927.	2.2	5.4	29.1	29.8	8.6	36.6	14.0

## Memphis, Tenn.

December, 1918.	20.3	27.7	( <sup>1</sup> )	26.8	25.4	16.1	18.3
June, 1919.	22.7	38.3	8.2	23.4	30.7	20.9	23.3
December, 1919.	28.4	66.2	23.1	34.1	53.2	28.3	35.2
June, 1920.	38.8	77.5	35.9	49.7	67.1	38.8	46.4
December, 1920.	7.0	59.0	66.2	105.4	53.9	43.2	39.3
May, 1921.	14.2	36.1	79.7	64.5	29.9	42.9	26.7
December, 1921.	11.2	15.3	77.3	67.1	14.7	42.3	23.2
June, 1922.	15.1	7.3	74.8	56.3	6.8	37.8	18.2
December, 1922.	14.9	6.7	72.5	68.5	12.2	37.4	18.6
June, 1923.	13.9	9.8	72.3	62.8	23.2	38.1	19.9
December, 1923.	11.2	11.0	72.5	65.0	23.4	37.3	21.0
June, 1924.	17.1	9.5	72.4	66.2	18.6	36.3	18.2
December, 1924.	9.2	6.4	68.6	66.2	20.1	37.4	20.4
June, 1925.	7.1	5.9	66.4	55.7	20.1	38.5	20.5
December, 1925.	2.0	4.7	60.4	71.4	20.1	37.8	22.0
June, 1926.	4.1	4.0	57.0	63.3	18.2	36.7	19.9
December, 1926.	5.7	3.9	53.9	80.1	17.1	37.7	19.9
June, 1927.	7.2	1.9	50.2	79.4	16.0	36.6	18.1

<sup>1</sup> Decrease.<sup>2</sup> No change.

## CHANGES IN COST OF LIVING

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TABLE 4.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO JUNE, 1927—Continued

*Minneapolis, Minn.*

Date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1918.....	17.7	33.5	10.1	14.7	18.1	12.3	15.8
June, 1919.....	21.4	40.1	12.0	13.4	23.6	15.9	18.8
December, 1919.....	34.1	67.0	8.0	22.4	45.6	25.4	32.7
June, 1920.....	50.0	76.7	10.7	36.9	65.5	31.3	43.4
December, 1920.....	13.0	63.6	36.8	60.3	65.8	37.6	35.7
May, 1921.....	17.9	41.0	39.0	52.8	43.3	37.9	23.7
December, 1921.....	14.9	14.3	46.7	50.2	27.9	37.4	20.7
June, 1922.....	16.0	7.9	44.6	43.7	21.4	32.6	17.3
December, 1922.....	15.3	6.5	46.8	47.0	22.5	32.6	18.0
June, 1923.....	16.4	9.2	42.5	44.9	29.7	32.8	17.4
December, 1923.....	14.7	9.3	47.4	45.6	28.2	32.0	18.8
June, 1924.....	17.9	7.4	44.7	42.2	22.8	31.3	16.2
December, 1924.....	14.3	5.6	44.9	43.2	23.3	31.2	17.3
June, 1925.....	1.8	4.9	40.7	40.9	23.2	31.1	17.6
December, 1925.....	6.9	4.4	41.0	42.6	22.1	30.6	20.3
June, 1926.....	5.8	3.4	36.8	45.9	19.9	32.8	19.6
December, 1926.....	2.3	2.5	36.1	46.6	17.0	33.5	18.2
June, 1927.....	4.1	1.1	30.2	44.3	15.1	32.6	17.2

*New Orleans, La.*

December, 1918.....	16.6	36.8	( <sup>2</sup> )	19.7	23.8	15.9	17.9
June, 1919.....	17.4	48.8	0.1	20.8	30.0	17.5	20.7
December, 1919.....	21.1	83.2	10.8	24.7	57.7	35.1	33.9
June, 1920.....	28.6	94.9	12.9	36.3	75.9	42.8	41.9
December, 1920.....	10.7	69.4	39.7	41.5	63.9	57.1	36.7
May, 1921.....	10.7	45.0	46.7	29.2	47.7	58.2	23.8
December, 1921.....	19.3	24.9	57.9	40.4	28.5	60.2	22.7
June, 1922.....	12.8	15.6	58.5	33.4	17.9	58.6	18.9
December, 1922.....	10.5	16.2	54.7	38.5	26.2	51.9	18.6
June, 1923.....	13.2	17.8	55.5	32.9	34.8	50.1	17.7
December, 1923.....	8.7	19.5	57.4	37.1	33.6	50.3	20.2
June, 1924.....	14.6	18.6	57.1	32.9	29.2	48.7	16.8
December, 1924.....	5.7	17.2	57.2	36.2	30.0	48.7	20.6
June, 1925.....	5.7	17.0	57.0	33.7	27.0	48.3	20.2
December, 1925.....	.9	15.9	56.8	34.2	27.5	47.9	22.7
June, 1926.....	5.2	15.7	57.0	39.6	26.6	46.7	20.1
December, 1926.....	1.6	15.6	56.2	43.8	25.0	47.4	21.7
June, 1927.....	3.9	13.4	56.0	38.5	21.8	48.6	20.3

*Pittsburgh, Pa.*

December, 1918.....	18.8	35.9	7.6	9.2	26.3	16.3	19.8
June, 1919.....	16.2	45.3	13.5	9.4	34.1	16.7	21.8
December, 1919.....	25.1	82.8	15.5	9.8	63.1	28.3	36.2
June, 1920.....	36.5	91.3	34.9	31.7	77.4	41.2	49.1
December, 1920.....	14.3	75.4	35.0	64.4	78.1	46.3	39.3
May, 1921.....	8.8	50.7	55.5	59.8	58.2	48.6	27.7
December, 1921.....	5.6	23.6	55.3	66.2	31.6	48.0	22.8
June, 1922.....	12.2	17.3	56.7	66.0	20.1	43.4	17.8
December, 1922.....	5.4	13.1	56.7	72.8	25.1	42.8	20.1
June, 1923.....	5.4	14.8	60.4	68.4	29.4	44.1	21.3
December, 1923.....	2.1	14.9	60.7	76.9	29.0	43.1	22.0
June, 1924.....	7.5	13.7	71.8	74.8	29.0	45.3	22.4
December, 1924.....	2.4	11.2	72.1	92.2	29.8	46.6	24.9
June, 1925.....	1.2	11.1	75.2	91.2	27.7	46.7	26.0
December, 1925.....	6.2	10.5	75.2	89.9	28.0	46.8	26.5
June, 1926.....	2.6	7.8	75.4	88.0	25.3	46.1	26.2
December, 1926.....	5.6	5.5	75.0	91.9	24.3	46.4	27.2
June, 1927.....	2.2	5.2	74.7	88.8	22.6	46.3	25.4

<sup>1</sup> Decrease.<sup>2</sup> No change.

TABLE 4.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO JUNE, 1927—Continued

## Richmond, Va.

Date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1918	20.5	33.8	1.0	11.8	26.3	9.0	17.9
June, 1919	20.6	42.3	3.6	11.4	28.6	13.5	20.6
December, 1919	23.1	78.6	9.8	18.7	55.9	24.0	32.0
June, 1920	36.1	93.6	12.5	36.1	75.4	32.4	43.8
December, 1920	11.9	69.0	25.9	62.2	70.0	36.0	33.3
May, 1921	17.4	43.8	29.4	47.1	48.8	38.7	20.2
December, 1921	12.9	21.2	34.1	46.8	33.0	38.4	18.3
June, 1922	17.8	12.9	34.5	33.4	27.6	34.7	13.2
December, 1922	16.3	10.6	35.3	54.2	29.4	33.5	14.4
June, 1923	17.2	12.5	35.7	52.7	40.0	33.9	14.9
December, 1923	14.8	12.9	39.4	61.2	40.5	35.4	17.1
June, 1924	11.3	11.9	39.5	49.1	37.8	35.8	13.5
December, 1924	3.3	8.9	41.3	47.9	38.5	35.7	16.5
June, 1925	2.4	8.6	41.4	44.2	38.2	36.0	16.7
December, 1925	4.8	8.4	40.4	53.6	39.2	39.1	20.8
June, 1926	1.6	8.1	39.6	51.0	38.1	40.8	19.7
December, 1926	.9	7.0	36.0	61.4	36.7	40.8	19.3
June, 1927	1.2	5.8	34.0	51.9	35.6	40.9	17.4

## St. Louis, Mo.

December, 1918	18.0	32.4	2.7	4.8	21.8	14.5	16.7
June, 1919	16.1	39.3	3.8	3.7	32.5	15.7	17.9
December, 1919	26.2	78.1	16.8	8.2	52.9	30.3	34.2
June, 1920	46.2	89.7	29.8	19.6	73.1	37.6	48.9
December, 1920	8.8	70.0	42.4	42.6	70.2	43.2	35.4
May, 1921	10.1	43.8	52.5	30.9	43.5	42.1	23.1
December, 1921	11.6	17.2	63.8	33.4	19.2	40.6	18.5
June, 1922	12.1	7.9	65.7	32.3	12.8	33.2	15.1
December, 1922	9.5	6.3	68.0	48.9	14.9	33.4	17.0
June, 1923	11.5	9.0	74.6	30.8	29.8	33.4	17.7
December, 1923	7.5	9.6	79.5	32.1	30.5	35.8	20.6
June, 1924	11.4	8.6	83.4	21.6	26.2	35.7	18.8
December, 1924	6.5	7.9	83.4	24.6	27.4	35.8	20.7
June, 1925	2.5	7.4	85.2	19.5	28.0	36.6	22.4
December, 1925	3.4	6.9	85.4	26.9	27.9	37.0	25.0
June, 1926	2.8	6.8	84.7	18.3	27.1	36.6	24.1
December, 1926	2.0	7.0	83.2	38.9	22.7	36.6	22.5
June, 1927	1.2	4.4	81.0	34.0	22.3	36.5	23.2

## Scranton, Pa.

December, 1918	21.3	34.4	0.5	24.7	27.0	21.4	21.0
June, 1919	18.1	49.6	6.2	25.7	35.6	24.9	25.0
December, 1919	26.9	82.1	2.4	31.5	48.9	34.7	37.1
June, 1920	41.4	97.7	17.2	43.5	62.8	47.9	51.5
December, 1920	17.8	76.5	18.5	67.3	62.0	50.4	39.1
May, 1921	4.0	54.3	41.5	62.8	48.6	54.6	28.2
December, 1921	4.1	29.1	44.6	67.1	30.7	52.4	26.3
June, 1922	6.7	24.2	52.8	68.0	24.2	49.9	20.9
December, 1922	2.1	20.7	53.6	68.6	28.5	49.3	22.4
June, 1923	5.1	21.7	50.0	65.2	34.7	51.4	22.4
December, 1923	.2	23.2	60.8	75.3	34.9	51.7	25.8
June, 1924	8.7	22.2	67.6	68.9	31.6	53.7	22.4
December, 1924	1.6	21.1	68.6	75.7	34.6	53.7	25.8
June, 1925	1.4	20.3	71.0	70.3	33.9	54.8	27.0
December, 1925	9.6	20.2	70.5	99.8	33.9	55.4	32.0
June, 1926	4.7	19.5	71.4	77.8	34.4	55.9	29.0
December, 1926	6.7	18.3	72.4	78.5	33.7	55.9	29.8
June, 1927	4.2	17.2	73.1	71.4	32.4	55.7	28.2

<sup>1</sup> Decrease.

The following table shows the increase in each item of expenditure, in the United States from 1913 to June, 1927. These figures are a summarization of the figures for the 32 cities, the results of which appear in the preceding tables, computed on a 1913 base.

TABLE 5.—CHANGES IN COST OF LIVING IN THE UNITED STATES, 1913 TO JUNE, 1927

Date	Per cent of increase over 1913 in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
December, 1914.....	5.0	1.0	(1)	1.0	4.0	3.0	3.0
December, 1915.....	5.0	4.7	1.5	1.0	10.6	7.4	5.1
December, 1916.....	26.0	20.0	2.3	8.4	27.8	13.3	18.3
December, 1917.....	57.0	49.1	.1	24.1	50.6	46.5	42.4
December, 1918.....	87.0	105.3	9.2	47.9	113.6	65.8	74.4
June, 1919.....	84.0	114.5	14.2	45.6	125.1	73.2	77.3
December, 1919.....	97.0	168.7	25.3	56.8	163.5	90.2	99.3
June, 1920.....	119.0	187.5	34.9	71.9	192.7	101.4	116.5
December, 1920.....	78.0	158.5	51.1	94.9	185.4	108.2	100.4
May, 1921.....	44.7	122.6	59.0	81.6	147.7	108.8	80.4
September, 1921.....	53.1	92.1	60.0	80.7	124.7	107.8	77.3
December, 1921.....	49.9	84.4	61.4	81.1	118.0	106.8	74.3
March, 1922.....	38.7	75.5	60.9	75.8	106.2	103.3	66.9
June, 1922.....	40.7	72.3	60.9	74.2	102.9	101.5	66.6
September, 1922.....	39.7	71.3	61.1	83.6	102.9	101.1	66.3
December, 1922.....	46.6	71.5	61.9	86.4	108.2	100.5	69.5
March, 1923.....	41.9	74.4	62.4	86.2	117.6	100.3	68.8
June, 1923.....	44.3	74.9	63.4	80.6	122.2	100.3	69.7
September, 1923.....	49.3	76.5	64.4	81.3	122.4	101.1	72.1
December, 1923.....	50.3	76.3	66.5	84.0	122.4	101.7	73.2
March, 1924.....	43.7	75.8	67.0	82.2	121.3	101.1	70.4
June, 1924.....	42.4	74.2	68.0	77.3	116.0	101.1	69.1
September, 1924.....	46.8	72.3	68.0	79.1	114.9	101.1	70.6
December, 1924.....	51.5	71.3	68.2	80.5	116.0	101.7	72.5
June, 1925.....	55.0	70.6	67.4	76.5	114.3	102.7	73.5
December, 1925.....	65.5	69.4	67.1	86.9	114.3	103.5	77.9
June, 1926.....	59.7	68.2	65.4	80.5	110.4	103.3	74.8
December, 1926.....	61.8	66.7	64.2	88.3	107.7	103.9	75.6
June, 1927.....	58.5	64.9	62.1	80.8	105.2	104.5	73.4

<sup>1</sup> No change.

The following table shows the per cent of decrease in the price of electricity on the dates specified as compared with the price in December, 1913. These figures are based on the average prices for household use in 32 cities and are included in the preceding tables under the item "Fuel and light."

TABLE 6.—PER CENT OF DECREASE IN THE PRICE OF ELECTRICITY AT SPECIFIED PERIODS AS COMPARED WITH DECEMBER, 1913

Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913
December, 1914.....	3.7	September, 1921.....	4.9	March, 1924.....	8.6
December, 1915.....	6.2	December, 1921.....	4.9	June, 1924.....	8.6
December, 1916.....	8.6	March, 1922.....	4.9	September, 1924.....	8.6
December, 1917.....	11.1	June, 1922.....	6.2	December, 1924.....	8.6
December, 1918.....	6.2	September, 1922.....	6.2	June, 1925.....	9.9
June, 1919.....	6.2	December, 1922.....	7.4	December, 1925.....	9.9
December, 1919.....	7.4	March, 1923.....	7.4	June, 1926.....	11.1
June, 1920.....	7.4	June, 1923.....	7.4	December, 1926.....	11.1
December, 1920.....	4.9	September, 1923.....	8.6	June, 1927.....	12.3
May, 1921.....	4.9	December, 1923.....	8.6		

# **LABOR AGREEMENTS, AWARDS, AND DECISIONS**

## **Labor Agreements**

## **Electric Railways—Chicago & Joliet Electric Railway Co.**

**I**N THE agreement made by the electric railway employees, Division No. 228, with the Chicago & Joliet Electric Railway Co. and the Chicago & Joliet Transportation Co., effective for three years from January 1, 1927, is a section relative to insurance covering sickness and nonoccupational accidents, as follows:

**SECTION 15.** Effective January 1, 1928, in addition to the life insurance that the party of the first part is now providing for its employees, each member of the party of the second part after one year's continuous service in the employ of the party of the first part shall receive insurance covering sickness and non-occupational accidents, which shall provide for payment of \$20 per week during the period of disability for a period not exceeding 26 weeks, payment to begin after first seven days of disability.

Where occupational accidents occur the usual workmen's compensation benefits will be paid, and when such benefits do not amount to \$20 per week an additional amount will be paid to make the total amount \$20 per week.

## Awards and Decisions

## **Clothing Industry—Chicago**

**I**N CASE No. 1047, decided January 3, 1927, a second baster was suspended for interfering when the foreman returned work to another worker. The impartial chairman, in commenting upon the circumstance, said:

Interference by one worker when work is returned to another is entirely unwarranted and can only make for chaos. If a worker feels that work should not have been returned he can take it up with the shop chairman who is elected for that purpose. The agreement does not contemplate self-appointed shop chairmen. The board feels that the worker was not unjustly suspended but that discharge would be too severe a penalty. Reinstatement without pay is directed.

## **Clothing Industry—New York**

**I**N CASE No. 342, decided May 4, 1927, a New York clothing firm requested permission to employ a cheaper vest contractor to make vests matching a cheaper-grade coat, in addition to its present contractor who was making a better grade of goods. The union objected to the request, contending that the present contractor was getting but very little work and that when a firm asks for a cheaper contractor it is generally done for the purpose of getting rid of the former contractor.

The impartial chairman decided as follows:

After thoroughly looking into this matter, the impartial chairman finds that the firm is getting its work done as cheaply, if not more cheaply, than other firms handling a similar type of merchandise. The impartial chairman realizes that the firm is now making a cheaper line of goods, but has established to his satisfaction that since its reorganization all of the firm's requests made upon the exchange in order to enable the firm to make up cheaper lines have been granted, and that appreciable reductions in the cost of pants, coats, and vests have been secured. As the firm has obtained cheaper contractors to make up the cheaper line of goods, and as the firm is not paying more for the production of its merchandise than other firms doing a similar line of work, the impartial chairman feels that he must at this time deny the request of the firm for a cheaper vest contractor.

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#### Locomotive Firemen—Southeastern Territory

C. J. GOFF, W. J. Jenks, and Grafton Green as arbitrators rendered a decision June 16, 1927 in a dispute between the locomotive firemen and enginemen and certain railroads in the southeastern territory. The requests of the employees were seven in number, as follows:

1. Except as otherwise provided herein, existing rates of pay for firemen, helpers, hostlers, and outside hostler helpers shall be increased \$1 per day.
2. In freight service on steam, electric, or other power weighing 250,000 pounds and over on drivers and on Mallet engines, existing rates of pay shall be increased \$1.25 per day.
3. Gradations of locomotives, according to weights on drivers, to be extended to 550,000 pounds and over in freight service, with an additional increase of 25 cents per day to be applied for each 50,000 pounds above 250,000 pounds on drivers.
4. It is understood that the weight on all other power-driven wheels will be added to the weight on drivers of locomotives that are equipped with boosters, and the weights produced by such increased weights shall fix the rates for the respective classes of service.
5. In all passenger service, the earnings from mileage, overtime or other rules applicable, for each day service is performed shall be not less than \$6.25 for firemen.
6. Existing rates of pay, in excess of standard rates, shall be increased the same amount as proposed for the standard rates.
7. Note: All arbitraries and special allowances to be increased proportionately.

The arbitrators decided in regard to the first and second requests "that the rates of pay of firemen engaged in all road service except passenger service shall be increased 40 cents per basic day and that the rate of pay of all other employees involved shall be increased 35 cents per basic day." In regard to the fifth request the minimum rate was placed at \$5.60. The third request was denied, the fourth, sixth, and seventh were granted.

C. J. Goff presented a dissenting opinion, arguing that the increase granted was insufficient. Extracts from his opinion follow:

The increases awarded by the majority of this board furnish a disheartening example of the weakness of arbitration as a means of procuring just compensation for wage earners. A brief review of the record will disclose the reasons for this conclusion and will explain the necessity for an emphatic dissent.

It is almost impossible to obtain a consideration of a wage question solely upon the record made in an arbitration, because matters outside the record, including general and uninformed public opinion, always seem to affect the judgment of those to whom a particular question is submitted.

The record shows without contradiction the following facts:

1. The dominant daily wage rate of firemen in 1926 was \$5.72.
2. The average daily wage rate for 824,313 skilled workers in the United States, according to the latest report of the United States Bureau of Labor Statistics, in 1926, was \$9.18.
3. The average increase in union wages since 1913 was shown to be over 150 per cent.

4. It was shown without contradiction that there had been an enormous increase in the average standard of living in the United States and that the average annual income per person gainfully occupied had increased from \$791 in 1909 to \$2,010 in 1926.

5. It was shown that the average annual income per family had increased from \$2,489 in 1921 to \$3,311 in 1926.

6. It was shown that during the last 20 years the revenue tons per train had increased practically 100 per cent and the average tractive power per locomotive had increased over 80 per cent, imposing on the firemen increased physical and mental labor, and greater responsibility.

7. It was shown that in this period the gross ton miles per train hour, the standard measure of operating efficiency, had increased over 100 per cent.

8. In short, the evidence which was not contradicted either in cross examination or by any counterevidence showed that the value of the service of a locomotive fireman had increased approximately 100 per cent in the last 20 years and that the average prosperity and standard of living had increased approximately 50 per cent.

9. The uncontradicted evidence showed that because of the increased size of locomotives, promotion had been greatly retarded and there were 1,811 firemen furloughed from service, subject to call upon 30 days' notice.

10. The figures brought in by the railroads' own witnesses showed that the average earnings of 8,679 men amounted to approximately \$129 per month.

11. To obtain a view of the average earnings of the locomotive firemen, using the figures furnished by the railroads' own witnesses, there may be eliminated from the computation 1,811 furloughed men earning nothing; 2,668 men earning less than \$100 a month, and 1,279 men earning over \$200 a month. The average earnings of the remaining 4,732 men, according to the figures furnished by the railroad witnesses, were \$156.70 per month.

The documentary evidence presented in behalf of the employees was so accurate that not a single fact or figure so presented was questioned or contradicted. The underlying data upon which the major exhibits of the railroads were based were not produced, although demanded by the representatives of the employees from the first day of the hearing. The inaccuracy and misleading character of these major exhibits of the carriers as revealed under cross-examination, appeared so clear to one familiar with the transportation industry, that it seemed at the end of the hearing that the carriers had made no effective defense.

It should also be stated that although the reports of the carriers introduced in the record showed great prosperity, enormously increased earnings and ample ability to pay many times the increases requested, the representatives of the employees studiously refrained from basing their case upon the financial prosperity of the roads, and no issue of ability to pay or inability to pay was raised by either side. This case, therefore, was submitted on the simple, direct basis of fixing just compensation for these employees, considering the value of their service, the labor and responsibility required, the occupational hazard endured, the wages paid to similar workers, and the general standard of living in the communities in which they live. Skilled workers in other lines of industry have demanded and received their share of the national income. Railway employees in the present case, instead of forcing their claims, have petitioned for justice. It appears from this award that what is economic justice is not a matter which can be safely submitted to the judgment of others.

Considering the case as submitted and the uncontradicted evidence, the increases awarded are wholly inadequate and subject these employees to unjust discrimination. Therefore, I do not agree with the decision of the majority upon the first, second, and fifth requests made on behalf of the employees.

**Maintenance-of-Way Employees—Louisville & Nashville Railroad**

A DISPUTE between the Louisville & Nashville Railroad and its maintenance-of-way employees was settled June 9, 1927, by a decision of three arbitrators, Col. L. L. Morton selected by the carrier, T. C. Carroll selected by the employees, and Judge Charles Kerr appointed by the United States Board of Mediation. The employees demanded an increase of 5 cents per hour. The board made the following increase, effective June 1, 1927:

B. and B. foremen and assistants, B. and B. gang foremen and section foremen, \$6 per month; B. and B. carpenters, painters, and apprentices, and engineers (except steam shovel), firemen, and labor foremen in shops, 3 cents per hour. Several other classes of employees received increases ranging from 1 to 2 cents per hour.

The award is followed by three opinions, one by each member of the board. Extracts taken from each opinion follow:

*Comment by the chairman.*—During the progress of the hearing the proof presented by each side has taken a rather wide range involving intricate social, industrial, and economic problems, intimately connected with the immediate question involved. Some of these may be noted.

It has been urged with great earnestness by the representatives of the employees that every employee that works for wages should be paid a living wage. What is a living wage is much easier to illustrate that it is to define. To the employee, where the wage paid makes existence a continual struggle, it is a reality, to the analyst absorbed in the earning capacity of invested capital, it is an abstraction. The employees affected by the present dispute embrace the lowest-paid class of workmen engaged in railway employment. As generally applied the term is more applicable to them than to any other class of laborers. It exists in the mind of the average workingman, particularly among the unskilled workmen as his conception of a fair remuneration for his labor. With him it is more than a theory, it is a principle of industrial justice. Conceding its existence, in practical application it has limitations. A living wage for one is not a living wage for another. Environment, dependents, locality, cost of living, station in life are elements that enter into the question of the living wage. A single man, with no dependents, performs the same labor as a married man with an ever-increasing family, yet each renders to his employer the same service. What would be a living wage to one would not be a living wage to another, each performing the same service. In giving thought to the subject, there are certain facts and conditions that can not be ignored. The unskilled workman, the man whose existence depends upon his daily wage, forms much the greater part of our industrial life. Industrialism depends for its continued maintenance upon the family which the workman rears.

An examination of the schedules submitted shows that the highest wages are paid to trackmen by roads north of the Ohio and Potomac rivers. Accepting the law of supply and demand as an explanation, it follows as a result that the demand for labor south of these rivers is not as great as north, or that the supply is greater, in either of which events there exists a resultant cheapening of labor. In accepting this explanation much difficulty is encountered. The highest rate noted in the region served by the Louisville & Nashville to trackmen is 63 cents per hour, and the lowest 18 cents per hour. The weighted average of wages paid trackmen by the Louisville & Nashville is approximately 30.50 cents, while the weighted average of the lowest connecting road operating is 20.20 cents. The rates of the Louisville & Nashville south of the Ohio ranges from 36 cents per hour to 26 cents. Making all due allowances for such variations as may exist in the cost of living, these extremes of high and low can not be attributed solely to the law of supply and demand. In some divisions on the Louisville & Nashville there are as many as six different rates.

These features of the proof submitted are noted for the reason that they were emphasized at the hearing and have influenced, to some extent, the results reached. In giving consideration to the question of supply and demand as applied to railway employees, it must be noted that it does not apply to these employees with the same force it does to other unskilled laborers. Certain independent contractors have testified that a minimum wage scale for unskilled labor is a neces-

sary consideration in all competitive contracts. This application of the rule, which must be recognized, does not apply with the same force to railroad employees that it does to other classes of labor, for the reason that the rates which a carrier may charge in a given territory are fixed by law, whereas the contractor is influenced in competition with his competitors by a minimum wage scale in a given locality. Between competing carriers, serving the same territory acquisition of business is the chief competition. It is true that railroads benefit from a minimum wage the same as any other employer, but the reason for a supply and demand wage scale is not as nearly controlling where there is a fixed carrier charge.

In the adjustment reached, which is far from being satisfactory, an attempt has been made to distribute the increase in such a way that some of the apparent inequalities may be eliminated.

The request for an increase in wages presented by the employees would represent an annual increase of approximately \$2,000,000. Capitalized at 6 per cent this would represent about \$34,000,000, which would be 30 per cent of the total capitalization of the Louisville & Nashville Railroad, and represent approximately 2 per cent on its total capital stock. Applied to the net operating income of the road for 1926 it would result in reducing the net operating income about 8 per cent. While the net operating income of the whole Louisville & Nashville system for 1926 was approximately 17 per cent, the net income on the total value of its property used in transportation was only 4.6 per cent. It has been shown during the progress of the hearing, however, that the capital structure of the various carrier systems is so varied that incomes and dividends can not for this reason be accepted as an invariable standard in fixing the wages of employees. In attempting to arrive at a just and equitable settlement of all differences involved certain recognized and undisputed facts have necessarily been taken into consideration. Much valuable information has been furnished concerning the cost of living in various localities, the wages paid outside workmen engaged in similar employment, and the wages paid by other carriers serving the same territory. The Louisville & Nashville is paying its trackmen at this time a weighted average of 30.50 cents per hour, while all other carriers in the same territory, including the Norfolk & Western and the Chesapeake & Ohio, are paying a weighted average of 28.13 cents per hour. Excluding these two named roads, which it is argued by the Louisville & Nashville representatives do not belong to what is classed as the Southeastern Division, the weighted average of all the other roads in the division is 25.19 cents per hour, or more than 5 cents per hour less than paid by the Louisville & Nashville. The rate paid its trackmen by the Louisville & Nashville as shown by the evidence, with one or two possible exceptions, is greater than any carrier in what is known as the Southeastern Division. To grant the request asked would increase the Louisville & Nashville weighted average to more than 10 cents per hour over the weighted average of all other roads in its division. The increase which has been allowed increases its weighted average more than 7 cents per hour over the Southeastern Division, and more than 4 cents including the Norfolk & Western and Chesapeake & Ohio. The weighted average of all the roads connecting with the Louisville & Nashville, 35 in number, is 33.83 cents. This includes 16 roads north of the Ohio River. Assuming the weighted average of the Louisville & Nashville under the proposed increase will be 32 cents per hour, it will then be only 1.83 cents below the general average of the 35 included roads. The fact that the wages on one road or a group of roads is too low would not justify another road in paying the same wages, but where the wages paid by one carrier is materially higher than all competitive roads serving the same territory that fact can not be overlooked.

Taking into consideration all the conditions shown to exist it is believed the changes here noted, and the changes shown by the award are as nearly a fair equitable adjustment of the questions in dispute as can be reached at this time, taking into consideration the limitation by which the arbitrators are bound under the arbitration agreement. The imperfections of the award are both recognized and appreciated. The separate opinions filed by my associates, for each of whom I entertain the very highest respect, clearly demonstrate the difficulties involved in reaching any conclusion. If any injustice has been done or any inequalities established, with respect to either the employer or employees, fortunately they can be remedied at the close of the year for which the revised rates are applicable.

*Comment by Mr. Carroll:* It is, as stated by the chairman, true that the weighted average rates of pay for all classes involved in this dispute, exclusive of foremen,

is in excess of such weighted average rates on the southeastern railroads as a whole.

Such rates are in the opinion of the undersigned manifestly unjust and unfair, and can not by any exhibition of the imaginary powers, be construed as a living wage and should not influence in the establishment of a just and reasonable wage in this dispute. The undersigned does not believe that the increases granted by this award will establish a just and reasonable wage for any particular class or individual employee.

Certain classes, and incidentally the lowest-paid classes involved in this dispute, are not given any increase at all, which is most unfair and unjust to such classes.

The undersigned thinks it unnecessary to set forth at length in this opinion his reasons for the above statements, and makes this award possible by casting his vote for it only as a small measure of relief for all the classes possible at this time under the existing circumstances.

*Dissenting opinion of Col. L. L. Morton:* The undersigned dissents from the above award of the majority, and maintains that the wage increases granted are not, in certain classes, justified by the evidence introduced in this case for the following specific reasons:

(1) The present wage scale was last adjusted by the United States Labor Board in 1923 and 1924, by awards presumptively fair and reasonable after consideration of all relevant facts, since which time there has been no substantial change in economic conditions, such as cost of living and continuity of employment, that would justify disturbing that wage scale. On the contrary, the trend in wholesale prices for the past 16 months has been distinctly downward, resulting inevitably in reduction in retail prices and increased purchasing power of the dollar.

(2) Specifically, with respect to the increases granted section laborers, the railroad company submitted uncontroverted evidence proving

(a) That it is paying on the average substantially higher wages than the combined average for the railroads of the entire southeastern region and higher than any competing system in its territory south of the Ohio River.

(b) That this class of labor is paid considerably more in actual money than similar common labor employed in industries along the company's lines and in addition is given other valuable considerations, such as free housing, free transportation, group insurance at low rates, and an established pension policy.

(c) That, as compared with the pre-war period, the increase in wages for the years subsequent to the war has far exceeded the increase in the cost of living, the present scale of wages of section laborers being about 137 per cent above the 1913 level, while the cost of living has only increased approximately 75 per cent.

(d) That the existing rates, being generally in excess of those paid for similar work by other railroads and industries, have rendered our service attractive and the positions preferential for that class of labor, resulting in a surplus of labor available for our service at the existing wage.

(e) That, for the above reasons, substantial justice has been done, and this class of labor has no reason to expect higher wages from the railroad company than it can command in other comparable employment.

(3) The award in this case, again referring specifically to section labor, compels the anomalous conclusion that the most generous employer of this class of labor in the South is being penalized, thereby imposing a burden that must ultimately be shared by the public from which all railroad revenues must be derived, and, from an economic standpoint, also adversely and unjustifiably affecting other railroads and employers of common labor in our territory. In my opinion, the award in this respect is not justified and is not supported by the evidence before the board.

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#### Printing Pressmen—Portland, Oreg.

THE International Board of Arbitration, Paul H. Douglas, chairman, for the American Newspaper Publishers' Association and the International Printing Pressmen and Assistants' Union sustained a decision on appeal by the Portland Web Pressmen's Union No. 17, against an award by a local arbitrator, continuing the existing wage

scale for pressmen at \$7.50 for day workers and \$7.75 for night workers with \$8.25 and \$8.50 for the pressmen in charge of presses in the day and night shifts, respectively, lowering the former scale for apprentices by 25 cents a day and providing that if during the life of the contract the cost of living in Portland changed appreciably the basic wages were to be readjusted according to whether the United States Bureau of Labor Statistics index for Portland rose or fell by a given number of points. The local union declared that an increase in wages was needed for five reasons:

(1) To provide the pressmen with an adequate standard of life; (2) to enable them to maintain the position as regards wages which they formerly enjoyed in respect to other crafts; (3) to provide differentials over certain other crafts which will be adequate to compensate the pressmen for the greater skill which, it is alleged, they must possess and for the greater dangers of illness and accidents which, it is declared, they must endure; (4) to raise wages in Portland nearer the level of the other major Pacific coast cities; and (5) to enable the pressmen to share in what are alleged to be the considerable and indeed increasing profits of the local newspaper industry.

Considering their claim, the board commented in part as follows:

The union introduced as evidence on the first point the cost in Portland, at current prices, of the minimum "health and decency" budget drawn up by the Bureau of Labor Statistics in 1919. This budget was drawn upon a much higher scale than that of mere physical existence and when priced in Washington in the summer of 1919 amounted to \$2,262 for a family of five. This quantity budget was priced for Portland in terms of January, 1924, prices by Miss Jessie Short, of Reed College, who found the total to amount to \$1,860 for such a family. (MONTHLY LABOR REVIEW, October, 1924, p. 66.) If the actual quantities of food consumed by Portland wage-earning families in 1918-19 were taken as the standard for this item of expenditures, the total cost would have been reduced to \$1,742. The union added to this budget an allowance for \$10,000 worth of insurance at a cost which was alleged to be \$244 and declared that the budget at current 1927 prices would amount to \$2,070 annually for a man, wife, and three minor children under 14 years of age. The estimated cost for the insurance seems to have been fixed at somewhat too high a figure since several insurance companies have quoted appreciably lower rates. (Transcript, p. 410. Publisher's Exhibit 27.) Since there was virtually no change in the cost of living during the period between the surveys, it would seem that the cost of such a budget with allowance for insurance would seem now to be somewhat under \$2,000.

\* \* \* \* \*

But the existing wage of \$7.50 a day, or \$45 a week, would amount annually, with full employment, to \$2,340 a year, or about \$350 more than even this budget. While some time would be lost because of illness, a recent study by the Bureau of Labor Statistics indicates that this would not be much more than 1 per cent and might be less since the percentage of time lost through the illness of 100,000 employees was reported as only 0.7 per cent. (United States Bureau of Labor Statistics Bull. No. 427: Health survey of the printing trades, 1922-1925, p. 11.)

Moreover, the trade, as a whole, offers quite steady employment. In 1922-23, indeed, the secretary of the local pressmen's union went so far as to report to the Oregon State Commissioner of Labor that the average number of days worked by the members of his union was 313. This is probably something of an exaggeration, but the evidence seems to indicate that a daily minimum of \$7.50 would mean in practice a minimum yearly income of nearly \$2,200. It should also be realized that many workers are paid considerably in excess of the union scale. The publishers submitted data covering the annual earnings of 40 men, which showed that their average yearly income in 1926 was \$2,445. (Exhibit No. 39.) This indicated that the pressmen's average earnings are appreciably above the minimum now established.

When all these facts are considered, the conclusion seems inescapable that the present scale provides the pressmen with a very considerable differential over the cost of maintaining themselves and their dependents upon the health and decency scale formulated by the Bureau of Labor Statistics.

It is also urged that the pressmen should be provided with an adequate differential for their skill and for the requirements of their occupation. That skilled

workers should receive higher wages than the unskilled is granted. The present scale, however, provides a very liberal differential for the pressmen. Their hourly rates are, for example, virtually double those of the unskilled labor. Nor is this all. The minimum daily rates for the workers in 59 Portland trade-unions, multiplied by the average number of days which the secretaries reported that they had worked, averaged for 1925 approximately \$1,422.

What weight, then, should be given to the contentions that the Portland scale should be raised to at least an equality with that of the other major Pacific coast cities? This is perhaps the major reason why the union members believe their wages should be increased. The present Portland scale is appreciably below the level paid in Seattle, San Francisco, Oakland, and Los Angeles. It is \$6 higher, however, than the scales of Butte, Mont., and Salt Lake City, and \$1.50 more than that of Denver. While below the level paid in metropolitan centers of Chicago, Cleveland, New York, Detroit, and St. Louis, it is still 10 per cent above that of Boston, and is, indeed, higher throughout than the scale in New England. The Portland wage rates are, of course, very much higher than those in the South, and are also higher than those paid in most of the smaller cities of the Middle West. They are approximately equal to the rates paid in the Middle Western and Southwestern cities of approximately the same population class, namely, Toledo, Milwaukee, Minneapolis, Kansas City, and Dallas.

The issue is therefore raised as to whether the wage scales prevailing over the Pacific coast as a whole, which are appreciably higher than those for the rest of the country, should be ordered into existence in Portland. Here it should be noted that Pacific coast wages in general exceed those in Portland not merely in the pressmen's trade but for virtually all crafts and industries.

Perhaps some differential should still be retained, and to the degree to which it is lessened it would certainly be desirable to have it result from a gradual increase in wages throughout the rest of the country rather than from a reduction in the wages on the Pacific slope. But, however this may be, the case for a very large differential does not seem to be so overwhelming as to justify me in overruling the local arbitrator and in raising wages in Portland to the level of San Francisco and Seattle. For this in effect would still further increase the differences in the wage scales of the Pacific coast as a whole as compared with those of the mid-Mountain States, the Middle West, the South, and the East.

There remains only the question as to whether the productivity of industry in general and the financial prosperity of Portland newspapers in particular does not justify an increase in wages. That there has been an unprecedented increase in per capita productivity since 1921 is evident. Thus in 1926 approximately 7 per cent fewer workers in manufacturing than in 1919 turned out nearly 30 per cent more physical product than in that year. This would seem to justify and indeed to necessitate an increase in real wages.

The evidence as to the specific ability of the Portland publishers to grant an increase was in the nature of the case indirect and inferential. The publishers declared that it was not an issue and presented no evidence. The material which the workers gathered showed an increase in circulation for three of the four newspapers and for the group as a whole. That the volume of advertising and that the advertising rates had gone up was also demonstrated. But since the workers had no power to go over the financial statements of the publishers and since the local arbitrator did not ask that they be produced, no definite conclusion can be drawn as to the degree in which the expenses of the newspapers increased during the period nor as to whether the actual profits have risen.

The chairman would like to point out that if complete fairness is to be secured in future arbitration proceedings it is vitally necessary that some way be found whereby, under proper safeguards, the arbitrator may acquaint himself with the actual financial condition of the industry and of the specific newspapers upon which he is passing. We now know from various types of budgets approximately how much it costs various workingmen's families to live; we know what the changes in the cost of living are from time to time and the wage scales and earnings in various cities and occupations. None of these form the exclusive standard by which wages are or should be fixed, but they are all factors which should at least be taken into consideration. Most of the facts about labor are therefore public. But the facts about the ability of capital to grant increases are not known. The reasons for the reluctance of the employers to make these public are obvious. The employers are naturally fearful lest their competitors learn facts about their business which might injure them financially. At the same time it should be realized that the pressmen have given up the right of striking to secure higher wages and have instead accepted the principle of arbitration. The

industry has thus been assured in this branch of peace. If arbitration is, however, to function with justice and with success, it must be furnished with full information. Arbitrators who are not given some of the essential facts can not make as correct decisions as they could if they were allowed access to these facts. Nor can the rank and file of the workers be expected to remain contented with decisions which might have been different had the financial status of the industry and of the companies been known. The chairman had no power in this case to compel such evidence to be furnished, but he can not let this occasion go by without pointing out to the parties to the agreement the necessity of providing such information if arbitration is successfully to continue. Safeguards should, of course, be thrown around such information to prevent it being abused, but ways of effecting this are, of course, quite possible.

In summing up, it can then be said that the evidence which has been presented has not been sufficient to lead me to believe that the decision of the local arbitrator should be overruled. When an injustice has been done the international board should feel free to overrule a local decision. But if the machinery is to function effectively both parties should be willing to abide by the local ruling save in cases where they believe they have been wrongfully injured. In the present case the Portland pressmen receive more than a living wage and have a comfortable differential over even the majority of skilled workers. I do not feel justified, therefore, in reversing the local decision in order to raise Portland wages to an equality with those of Seattle and San Francisco, particularly so, since it is not certain whether these differentials over the rest of the country will continue permanently to endure.

#### Railroads—Decision of Train Service Board of Adjustment for the Southeastern Region

**A CLAIM for extra pay for two assignments in the same eight-hour period was settled in Docket 270 by the Train Service Board of Adjustment for the Southeastern Region, June 21, 1927. The facts in the case are as follows:**

From January, 1919, to July 9, 1926, one helper on the first and second shifts and two helpers on the third shift, assigned to a hump switching crew in the freight yard, immediately adjacent to the passenger station, have been sent to the passenger station for a short period of time during their tour of duty to take road engines off and put them on passenger trains, under control of interlocking signals and switches; such movements, in some cases, consisting of only a light engine, and in other cases road engines handling one or more mail, baggage, or express cars, being set over from one track to another at the passenger station, helpers returning thereafter to their regular assignment in the freight yard, for which they were allowed foreman or yard pilot's rate of pay on account of the service performed at the passenger station.

On July 10, 1926, they were taken off and the foreman and switchman on another assignment "were required to let their engine stand idle and leave their regular assignment" and perform the pilot work as above described without extra compensation. The position of the company was as follows:

Our position is that the service being required of switchmen in this case is that service regularly assigned to crews performing switching service under the supervision of a regular foreman. The fact that road engine, handled by hostlers instead of yard engineers, was used to make movements, account of the short time allowed between arrival and departing time of trains, preventing the use of switch engines to which they are regularly assigned, does not entitle the claimants to an arbitrary day nor can it be claimed that they work on two assignments. Nor does paragraph (d) Article 41, reading: "Under no conditions will a crew be required to work short-handed when there is an extra man available" apply. The required number of men are assigned to this passenger switching crew and the fact that one man is piloting an engine to or from a train does not contemplate that the article is violated by reason of such service.

*Decision.*—The board decides that the employee required to perform this service at the passenger station is entitled to the foreman's rate of pay.

**Typographical Union—Denver, Colo.**

A DECISION of the International Joint Board of the American Newspaper Publishers' Association and the International Typographical Union, Paul H. Douglas, chairman, was recently made in a case between the Denver newspaper publishers and Typographical Union No. 49. Both parties wanted a readjustment of wages. The union asked for an increase from \$46.50 a week to \$54 for day work and from \$49.50 to \$60 for night work, while the employers asked for decrease to \$42 and \$45, respectively. The union wanted a reduction of hours from 45 to 42 per week and the employers asked for an increase to 48 hours. The union asked that men who work a day and night shift getting out a Sunday paper be paid \$2.50 in addition to the regular night scale. The employers asked that the \$1.50 rate paid for this service be removed. Finally the men asked for a weekly scale of \$66 for the lobster shift.

In commenting on these requests the board said in part as follows:

In 1914 the day scale in Denver was \$28.50, where it had remained since 1910. The increase in money wages during the intervening 13 years has therefore been \$18, or approximately 63 per cent. The exact increase in living costs in Denver during this period is under dispute. The index of the United States Bureau of Labor Statistics only covers the period from December, 1917, on and shows that in December, 1926, living costs were 20.4 per cent above this basic month. (*MONTHLY LABOR REVIEW*, February, 1927, p. 177.) This was a decrease of 2 points, or a little less than 2 per cent, in the cost of living as compared with December, 1925. The increase for the period prior to December, 1917, is, however, the disputed area. The union has used the increase in the country as a whole from 1913 to December, 1917, or 42.4 per cent, as the best guide for this period, and then, by applying the 20.4 per cent increase for the subsequent period, fixes the percentage increase in the cost of living at 71.4 per cent. This they declare is in turn corroborated by cost-of-living surveys which they themselves conducted in 1920 and 1923. (Union Exhibits Nos. 1 and 22.) The former study showed an increase in Denver from 1914 to late 1919 of 82.8 per cent, while the increase for the country as a whole from 1913 to December, 1919, was 83.1 per cent. It is argued that this similarity of movement justified the use of the country-wide index for the period prior to December, 1917.

This the publishers deny. They point out that since December, 1917, the increase for the country as a whole has been 23.3 per cent, whereas the increase in Denver has been but 20.4 per cent, or nearly 3 points less. This, it is argued, is at least inferential evidence that the Denver increase prior to December, 1917, was less than that for the country as a whole.

The exact increase since December, 1914, is therefore still in doubt. It has probably been more than the 59 per cent shown by the Colorado Industrial Commission. It should at this point be recognized that if we take December, 1914, and not 1913 as our base, that even accepting the union's claim that the country-wide index measured the rise in Denver prior to December, 1917, that the increase would be one of 67.8 per cent. It is very difficult to tell whether the actual increase has been less than this, although such information as we have for food indicates that it may have been slightly so. There is thus a zone of indeterminateness of some 9 points, with the probability that the actual index is at least somewhat above the bottom point of 59 per cent.

It seems safe, therefore, to say that the 63 per cent increase in money wages to the day workers has at the most just about paralleled the increase in living costs and left them at the most with only about the same purchasing power as in December, 1914. They may possibly actually have lost a slight amount of ground, although this at the most can not have been more than a few per cent. Since the night workers have received smaller relative increases than the day workers, they have almost certainly lost something in the real purchasing power of their wage rates.

That the real wages of the great majority of workers, on the other hand, has greatly advanced during this period is well known. An index which I have computed (*Supplement American Economic Review*, March, 1926, and *American*

Yearbook, 1926) shows the real earnings of employed workers in manufacturing to be approximately 29 per cent higher now than in 1914. It is patent, therefore, that the Denver printers have not shared in the advances which have been made by labor as a whole.

The evidence also shows that they have not made since 1914 gains equal to those secured by the newspaper printers in most other cities. Thus the average weekly wage rate in all cities over 200,000 population is now 99 per cent higher than in 1914, and even if we exclude the large urban centers and take only cities from 200,000 to 350,000 the increases enjoyed have, with the exception of Portland, Oreg., been more than 80 per cent and in some cases, such as that of Rochester, have been actually over 100 per cent. (See Union Exhibit No. 5.)

The rejoinder of the publishers to this contention is that the Denver scale was originally far too high. In 1910 there was but one higher scale in the country than the Denver rate of \$28.50. In 1914 there were only 7 of the 32 cities with a higher scale, namely, New York, Chicago, and five Pacific coast centers. The newspaper publishers, therefore, declare that the Denver printers need not expect any such increase as those in the other and formerly lower-paid centers. The chairman agrees that it does not follow that the Denver typographers should receive increases proportionately equal to their fellow craftsmen elsewhere, but he regards it as worthy of notice that 14 out of the 16 other cities of between 200,000 and 375,000 now actually have higher weekly wages than those of Denver. The employers, however, stress the comparison between the hourly rates in Denver and elsewhere instead of that between weekly rates. Due to the 45-hour week in Denver, this makes the average hourly rate for day workers in the 12 cities from 215,000 to 350,000 (omitting Jersey City) \$1.04, or only a fraction of a cent higher than that in Denver.

In fixing wages, however, attention should be fixed on the weekly as well as upon the hourly rates, and, judged by this standard, the Denver scale is now appreciably behind the other cities of its class.

The employers, however, maintain that this is justified because living costs are lower there than for the country. To support this contention they point out that the average expenditures of the families of the Bureau of Labor Statistics in Denver in 1918-19 was only \$1,335, whereas the average for the country as a whole was \$1,434. They point out that of the 92 cities sampled Denver was seventy-first in order of average expenditure. (News Exhibit No. 21.) While this evidence is introduced as proof that the living costs in Denver are lower than elsewhere, this conclusion would follow only if the quantitative budget sampled had been virtually identical in each city. This is not the case in the 1918-19 budget inquiry which is cited. (Bulletin 357 of the United States Bureau of Labor Statistics.) No attempt was made to price an identical budget in the various cities, but the actual expenditures of each family studied were instead recorded. The fact that the average expenditure for one city was lower than for another is no necessary indication that it actually cost less to live in the former locality; it may instead have meant that the families had less to live on.

The truth of the matter is that we know little of comparative costs between sections of the country, and more especially between cities. There is a pressing need for such index numbers as will measure differences in living costs between geographical units, but until this is done it seems unwise to hold the Denver printers to a weekly scale which is greatly less than those enjoyed by their fellow workmen in other cities.

The fact that they enjoy shorter hours, however, should also be taken into consideration and serve to lessen the necessity of raising their wages to a complete equality with the average for other cities of their own class. A wage of \$48 a week would still be approximately \$1.50 below the average for the cities from 200,000 to 375,000 and would be exceeded by the scales of 8 of these 16 cities.

Since the night workers have not secured as large a relative gain as the day workers, a slightly higher differential should, it seems, be allowed for them. I am therefore fixing the day scale at \$48 and the night scale at \$51.50. This provides an increase of \$19.50 over 1914 for the day workers, or approximately 69 per cent. It thus gives a slight increase in real wages though still by no means as great relative gains as those made by the rank and file of other workers. The position of the Denver workers was, however, formerly so relatively sheltered that it would be idle to expect that such differentials could be maintained in perpetuity.

The forecasts which the publishers offered of a possible decline in business during the next few months hardly seemed so definitely established as to justify refusing the printers the ratification of the wage scales which have been outlined

above. The growth of Denver since 1910 has been healthy and the newspapers seem to have every prospect of sharing in the long-time gains which will be made by that city.

I shall set December 1, 1926, as the date at which these increases are to take effect, and shall ask that the retroactive payments be made as speedily as possible by the publishers to those who have been employed subsequent to this date.

Forty-five hours per week is under normal conditions not an excessive working period. It is still appreciably less than the average for industry as a whole. In view of the fact that according to the testimony of some of the union representatives that the physical output of the printers has certainly not increased greatly (Transcript, pp. 560, 561), and since there is some evidence to indicate that it may actually have decreased, it would seem inadvisable to grant at the moment any great reduction in hours, and the present working week is accordingly retained.

It is highly objectionable for men to work two successive shifts, even though they only work six and not seven shifts per week. The manager of the paper which works the double header has stated that his organization is planning to so schedule the work during the week that such a double header will soon be abolished. Pending this time, it would, however, seem proper to increase the present differential over the night shift from \$1.50 to \$2.

It should be pointed out that those now working on shifts which begin at 10 o'clock and later will in the future receive \$3.50 more per week than those on the day shift. This is 50 cents more than at present. The fact, moreover, that night rates are paid for all hours of a shift if it either begins or ends in the night hours furnishes further protection to those on the so-called lobster, or third, shift. An additional compensation hardly seems necessary, therefore, at this time.

### Agreement Concerning Night Work in Chilean Bakeries<sup>1</sup>

THROUGH the efforts of the General Labor Office in Chile, employers and workers have come to an agreement with regard to the enforcement of the decree prohibiting night work in bakeries. The points on which agreement has been reached are as follows: Work is to begin at 4 a. m.; no worker is to be allowed to live on the premises of the bakery; two bakers may work from 1 a. m. in the preparation of the dough; women shall not be employed as bakers; the authorities shall appoint a police agent who will remain at the bakery from 8 p. m. to 8 a. m. to check the arrival of the workers. Those bakers who violate the law are to be severely punished.<sup>2</sup>

<sup>1</sup> El Mercurio, Santiago, Chile, Mar. 19, 1927.

<sup>2</sup> For a summary of the original law see July, 1926, issue of the **LABOR REVIEW** (p. 45).

There was an increased flow of immigration to America from all parts of the world during the month of May, 1927. The number of aliens admitted nearly doubled in May over April. The number of alien passengers leaving the United States decreased by about one-half, while the number of citizens leaving the country increased by about 10 per cent.

## IMMIGRATION AND EMIGRATION

### Statistics of Immigration for May, 1927

By J. J. KUNNA, CHIEF STATISTICIAN U. S. BUREAU OF IMMIGRATION

**T**HE month of May shows 52,718 aliens admitted and 23,126 departed, a larger inward and outward alien passenger movement than any other month since last fall. Of the alien admissions, 31,819 were immigrants and 20,899 nonimmigrants, and of the departures 6,148 were emigrants and 16,978 nonemigrants.

There were eight races each of which had over a thousand immigrants during May. The Mexican, with 6,785, was in the lead, followed by the German (5,547), Irish (4,606), English (3,180), Italian (2,546), Scotch (2,208), Scandinavian (1,822), and French (1,398). These eight races furnished 28,092, or about 88 per cent, of the immigrants during May.

The May immigrants coming from the European Continent numbered 17,925, or about 56 per cent of the month's total, while 13,481, or 42 per cent, came from the Americas. The balance came from other parts of the Eastern Hemisphere. There were only five countries in Europe that contributed over a thousand immigrants each this month: Germany (4,934), Irish Free State (3,534), Italy (2,507), Scotland (1,509), and England (1,058). About 31,000, or 11 per cent, more immigrants have come in during the past 11 months than during the corresponding period of last year.

There was a somewhat larger number of aliens denied admission to the United States during May than any other month since last December. The total was 1,709, of whom 1,291 were returned to Canada and 190 to Mexico, the remainder, at the seaports, to other countries. Of the 526 aliens arrested and deported under warrant proceedings 220 were sent to countries in Europe, 278 to countries in the Western Hemisphere, and 28 to Asia and islands in the Pacific.

Of the 52,718 aliens admitted during May about 3 out of every 10, (15,585) were charged to the quota. There were 12,728 natives from nonquota countries, 9,864 alien residents of the United States returning from a trip abroad, 7,056 temporary visitors for business or pleasure, 3,358 persons passing through the country and 2,184 wives and children of United States citizens, while the remainder belonged to the other admissible classes under the act of 1924.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1926, TO MAY 31, 1927

Period	Inward					Aliens debarred from entering <sup>1</sup>	Outward					Aliens deported after landing <sup>2</sup>		
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total			
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total					
1926														
July	22,283	16,096	38,379	25,981	64,360	1,746	7,052	17,970	25,022	60,223	85,245	816		
August	29,286	20,467	49,753	52,683	102,436	1,601	7,376	15,410	22,786	42,248	65,034	1,121		
September	35,297	25,680	60,977	71,268	132,245	1,817	6,634	16,392	23,026	26,268	49,294	885		
October	34,528	22,059	56,587	34,176	90,763	1,566	5,377	13,803	19,180	18,150	37,330	1,100		
November	30,756	16,185	46,941	21,844	68,785	1,713	6,859	13,078	19,937	17,992	37,929	1,085		
December	23,805	11,803	35,608	16,777	52,385	1,915	9,481	16,875	26,356	19,608	45,904	1,241		
1927														
January	18,804	9,219	28,023	16,913	44,936	1,499	3,928	10,053	13,981	21,483	35,464	900		
February	21,695	10,379	32,074	25,097	57,171	1,308	3,949	12,085	16,084	29,732	45,766	1,104		
March	29,868	16,370	46,238	32,752	78,900	1,437	4,244	13,502	17,746	27,041	44,787	1,380		
April	33,034	17,310	50,344	29,055	79,399	1,530	4,185	14,391	18,576	26,815	45,391	1,036		
May	31,819	20,899	52,718	26,238	78,956	1,709	6,148	16,978	23,126	28,849	51,975	526		
Total	311,175	186,467	497,642	352,784	850,426	17,841	65,233	160,537	225,770	318,409	544,179	11,194		

<sup>1</sup> These aliens are not included among arrivals, as they were not permitted to enter the United States.<sup>2</sup> These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING MAY, 1927, AND FROM JULY 1, 1926, TO MAY 31, 1927, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant		Emigrant	
	May, 1927	July, 1926 to May, 1927	May, 1927	July, 1926 to May, 1927
African (black).....	95	865	51	786
Armenian.....	65	899	7	47
Bohemian and Moravian (Czech).....	99	2,345	201	1,383
Bulgarian, Serbian, and Montenegrin.....	35	561	181	1,396
Chinese.....	43	983	291	3,866
Croatian and Slovenian.....	112	746	9	244
Cuban.....	238	1,700	66	840
Dalmatian, Bosnian, and Herzegovinian.....	9	66	70	379
Dutch and Flemish.....	271	2,956	96	812
East Indian.....	4	45	2	81
English.....	3,180	37,359	719	6,335
Finnish.....	50	604	53	423
French.....	1,398	17,866	147	1,436
German.....	5,547	54,102	1,014	4,485
Greek.....	265	2,280	215	2,915
Hebrew.....	855	10,497	14	205
Irish.....	4,606	42,500	109	1,312
Italian (north).....	320	2,411	100	2,096
Italian (south).....	2,217	14,304	951	14,784
Japanese.....	65	501	112	1,045
Korean.....	3	42	6	50
Lithuanian.....	101	530	28	270
Magyar.....	75	900	96	800
Mexican.....	6,785	59,337	130	2,684
Pacific Islander.....	2	8	1	7
Polish.....	305	3,945	181	2,232
Portuguese.....	42	785	145	2,236
Rumanian.....	41	383	98	1,040
Russian.....	82	1,149	42	454
Ruthenian (Russiak).....	29	398	2	19
Scandinavian (Norwegians, Danes, and Swedes).....	1,822	18,448	443	3,006
Scotch.....	2,208	24,035	100	1,795
Slovak.....	91	951	47	653
Spanish.....	111	950	175	2,420
Spanish American.....	377	2,845	148	1,398
Syrian.....	39	641	25	172
Turkish.....	23	103	10	154
Welsh.....	122	1,243	2	48
West Indian (except Cuban).....	40	343	37	690
Other peoples.....	38	368	24	208
Total.....	31,819	311,175	6,148	65,233
Male.....	18,613	180,451	3,762	46,782
Female.....	13,206	130,724	2,396	18,451
Under 16 years.....	4,766	47,559	275	2,566
16 to 44 years.....	24,463	236,803	4,443	48,080
45 years and over.....	2,500	26,813	1,430	14,587

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND INTENDED FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM, THE UNITED STATES DURING MAY, 1927, AND FROM JULY 1, 1927, TO MAY 31, 1927, BY COUNTRIES

[Residence for a year or more is regarded as permanent residence]

Country	Immigrant		Emigrant	
	May, 1927	July, 1926, to May, 1927	May, 1927	July, 1927, to May, 1927
Albania	37	227	11	216
Austria	80	989	72	385
Belgium	89	745	62	415
Bulgaria	13	213	8	100
Czechoslovakia	221	3,391	242	1,888
Danzig, Free City of	12	219	6	6
Denmark	248	2,332	35	413
Estonia	6	135	2	12
Finland	37	424	46	391
France, including Corsica	301	4,189	149	1,270
Germany	4,934	46,575	955	3,937
Great Britain and Northern Ireland:				
England	1,058	9,425	451	4,246
Northern Ireland	33	467	3	165
Scotland	1,509	12,050	55	1,348
Wales	92	1,024	28	28
Greece	212	1,852	210	2,909
Hungary	82	773	89	713
Irish Free State	3,534	26,970	95	966
Italy, including Sicily and Sardinia	2,507	15,564	1,042	16,825
Latvia	16	389	1	16
Lithuania	115	720	30	257
Luxemburg	12	104	4	8
Netherlands	159	1,648	37	353
Norway	706	5,913	268	1,537
Poland	589	8,395	173	2,173
Portugal, Including Azores, Cape Verde, and Madeira Islands	21	542	145	2,224
Rumania	103	1,125	101	1,086
Russia	94	1,007	20	216
Spain, including Canary and Balearic Islands	45	394	117	1,908
Sweden	680	7,978	125	799
Switzerland	223	1,997	53	503
Turkey in Europe	14	198	22	22
Yugoslavia	121	1,075	174	1,719
Other Europe	22	364	10	10
Total, Europe	17,925	159,504	4,775	49,103
Armenia		8	2	19
China	107	1,371	204	3,926
India	17	85	5	120
Japan	70	651	121	1,102
Palestine	47	436	7	130
Persia	4	31	5	27
Syria	39	572	28	155
Turkey in Asia	7	48	4	69
Other Asia	18	201	1	40
Total, Asia	309	3,403	467	5,588
Canada	5,259	75,398	237	1,759
Newfoundland	385	2,848	73	337
Mexico	6,856	60,239	148	2,762
Cuba	339	2,722	139	1,397
Other West Indies	124	927	128	1,919
British Honduras	4	107	2	15
Other Central America	156	1,430	53	509
Brazil	85	987	6	179
Other South America	272	2,444	83	1,038
Other America	1	1	—	—
Total, America	13,481	147,103	869	9,975
Egypt	17	212	—	20
Other Africa	14	258	4	74
Australia	59	436	25	326
New Zealand	14	225	4	117
Other Pacific Islands	—	34	4	30
Total, others	104	1,165	37	567
Grand total, all countries	31,819	311,175	6,148	65,233

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING MAY, 1927, AND FROM JULY 1, 1926, TO MAY 31, 1927, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted					
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total during May, 1927	Grand total July 1, 1926, to May 31, 1927
		July 1, 1926, to May 31, 1927	May, 1927	July 1, 1926, to May 31, 1927	May, 1927		
Albania	100	93	15	664	86	101	757
Andorra	100	8	6				14
Austria	785	846	71	1,473	91	162	2,310
Belgium	1,512	596	61	1,558	167	228	2,094
Bulgaria	100	119	5	222	15	20	341
Czechoslovakia	3,073	2,978	104	3,635	310	414	6,613
Danzig, Free City of	228	209	11	51	4	15	260
Denmark	12,789	2,462	245	2,129	209	454	4,591
Estonia	124	127	5	106	11	16	233
Finland	471	440	36	1,569	92	128	2,009
France	13,954	3,454	268	5,635	391	659	9,089
Germany	51,227	47,636	5,009	13,634	1,264	6,273	61,270
Great Britain and Northern Ireland:							
England		11,671	1,194	24,067	2,707	3,901	35,738
Northern Ireland		849	59	465	27	86	1,314
Scotland		13,185	1,565	9,184	833	2,398	22,368
Wales		1,142	100	939	85	185	2,081
Greece	100	160	8	3,832	414	422	3,992
Hungary	473	476	48	1,723	134	182	2,199
Iceland	100	61	6	24	4	10	85
Irish Free State	28,567	30,352	3,803	5,162	483	4,286	35,514
Italy	13,845	3,830	416	33,582	6,571	6,987	37,412
Latvia	142	166	8	240	12	20	406
Liechtenstein	100	24	1	1		1	25
Lithuania	344	330	31	908	122	153	1,238
Luxemburg	100	97	9	120	9	18	217
Monaco	100	8	1	10	3	4	18
Netherlands	1,648	1,485	132	2,281	195	327	3,766
Norway	6,453	5,959	706	4,373	614	1,320	10,332
Poland	5,982	5,645	397	6,778	520	917	12,423
Portugal	1,503	430	10	2,649	490	500	3,079
Rumania	603	704	62	1,750	154	216	2,454
Russia	12,248	1,947	118	2,630	219	337	4,777
San Marino	100	72		3			75
Spain	1,131	155	5	6,006	1,193	1,198	6,161
Sweden	9,361	8,585	621	3,851	360	990	12,436
Switzerland	2,081	1,876	211	2,422	198	409	4,268
Turkey in Europe	100	82	4	1,111	43	47	1,193
Yugoslavia	671	601	52	2,371	209	261	2,972
Other Europe	(1)	256	14	176	24	38	432
Total Europe	161,422	149,056	15,411	147,540	18,272	33,683	296,506
Afghanistan	100	1		1			2
Arabia	100	14	2	4	1	3	18
Armenia	124	56	1	105	13	14	161
Bhutan	100	1		1	1	1	2
China	100	120	8	7,787	624	632	7,907
India	100	99	17	506	59	76	605
Iraq (Mesopotamia)	100	75	7	27	2	9	102
Japan	100	23	1	6,610	587	588	6,633
Muscat	100			2			2
Nepal	100			1			1
Palestine	100	134	6	348	47	53	482
Persia	100	77	2	85	8	10	162
Siam	100	1		24	3	3	25
Syria	100	124	5	803	96	101	977
Turkey in Asia	(1)	36	1	740	138	139	776
Other Asia	(1)	191	12	172	19	31	363
Total Asia	1,424	952	62	17,266	1,598	1,660	18,218

<sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING MAY, 1927, AND FROM JULY 1, 1926, TO MAY 31, 1927, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted				Grand total July 1, 1926, to May 31, 1927	
		Quota immigrant		Nonimmigrant and nonquota immigrant			
		July 1, 1926, to May 31, 1927	May, 1927	July 1, 1926, to May 31, 1927	May, 1927		
Cameroon (British)	100	1	—	2	—	3	
Cameroon (French)	100	—	—	—	—	29	
Egypt	100	98	9	131	19	28	
Ethiopia	100	—	—	1	—	1	
Liberia	100	2	—	3	—	5	
Morocco	100	19	5	19	1	38	
Ruanda and Urundi	100	—	—	—	—	—	
South Africa, Union of	100	150	1	373	45	46	
South West Africa	100	1	1	—	—	1	
Tanganyika	100	—	—	—	—	—	
Togoland (British)	100	—	—	—	—	—	
Togoland (French)	100	—	—	—	—	—	
Other Africa	(1)	57	4	114	16	20	
Total, Africa	1,200	328	20	643	81	101	
Australia	121	151	12	3,252	306	318	
Nauru	100	—	—	—	—	3,403	
New Zealand	100	109	9	979	95	104	
New Guinea	100	—	—	—	—	1,088	
Samoa	100	3	—	13	2	2	
Yap	100	—	—	5	1	5	
Other Pacific	(1)	16	—	144	16	16	
Total, Pacific	621	279	21	4,393	420	441	
Canada	—	—	—	73,977	5,504	5,504	
Newfoundland	—	—	—	4,905	575	575	
Mexico	—	—	—	73,810	7,499	7,499	
Cuba	—	—	—	8,247	1,128	8,247	
Dominican Republic	—	—	—	844	118	844	
Haiti	—	—	—	214	27	214	
British West Indies	(1)	603	61	4,374	631	692	
Dutch West Indies	(1)	31	—	175	16	16	
French West Indies	(1)	30	2	58	10	12	
British Honduras	(1)	53	2	84	8	10	
Canal Zone	—	—	—	36	3	36	
Other Central America	—	—	—	3,052	381	3,052	
Brazil	—	—	—	1,476	201	201	
British Guiana	(1)	53	5	140	22	27	
Dutch Guiana	(1)	2	—	15	1	1	
French Guiana	(1)	—	—	—	—	17	
Other South America	—	—	—	4,959	635	635	
Greenland	(1)	—	—	2	—	2	
Miquelon and St. Pierre	(1)	6	1	39	3	4	
Total, America	—	778	71	176,407	16,762	16,833	
Grand total, all countries	164,667	151,393	15,585	346,249	37,133	52,718	
						497,642	

<sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

<sup>2</sup> Also includes aliens to whom visas were issued during the latter part of the fiscal year ended June 30, 1926, and charged to the quota for that year. (Nationality for quota purposes does not always coincide with actual nationality. See section 12 of the act.)

TABLE 5.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING MAY, 1927, AND FROM JULY 1, 1926, TO MAY 31, 1927, BY SPECIFIED CLASSES

[The number of immigrants appearing in this table and in Table 4 is not comparable with the number of statistical immigrant aliens shown in the other tables, by races, countries, States, and occupations]

Class	May, 1927	July, 1926, to May, 1927
<b>Nonimmigrants</b>		
Government officials, their families, attendants, servants, and employees.....	529	5,145
Temporary visitors for—		
Business.....	2,334	20,691
Pleasure.....	4,722	33,165
In continuous passage through the United States.....	3,358	25,694
To carry on trade under existing treaty.....	115	1,116
Total.....	11,058	85,811
<b>Nonquota immigrants</b>		
Wives of United States citizens.....	1,164	18,749
Children of United States citizens.....	1,020	17,284
Residents of the United States returning from a visit abroad.....	9,804	89,262
Natives of Canada, Newfoundland, Mexico, Cuba, Haiti, Dominican Republic, Canal Zone, or an independent country of Central or South America.....	12,728	144,781
Their wives.....	183	803
Their children.....	133	1163
Ministers of religious denominations.....	49	542
Wives of ministers.....	28	294
Children of ministers.....	52	609
Professors of colleges, academies, seminaries, or universities.....	3	130
Wives of professors.....	2	38
Children of professors.....		19
Students.....	87	1,729
Veterans of the World War.....	682	4,312
Wives of veterans.....	137	781
Children of veterans.....	139	933
Spanish subjects admitted into Porto Rico.....	4	9
Total.....	26,075	260,438
Quota immigrants (charged to quota).....	15,585	151,393
Grand total admitted.....	52,718	497,642

<sup>1</sup> Wives and unmarried children under 18 years of age born in quota countries.

<sup>2</sup> Does not include aliens born in nonquota countries who were admitted under the act as Government officials, visitors, returning residents, etc.

WEEKLY EDITION OF THE MONTHLY LABOR REVIEW  
ISSUED BY THE U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS  
TO INFORM THE PUBLIC OF THE STATUS OF LABOR AND INDUSTRY IN THE UNITED STATES.

## ACTIVITIES OF STATE LABOR BUREAUS

**A**MONG the labor activities of State bureaus the following, reported either directly by the bureaus themselves or through the medium of their printed reports, are noted in the present issue of the *Labor Review*:

*California*.—Changes in volume of employment and pay roll in 795 establishments in the State, page 147.

*Colorado*.—Report of operations under the State workmen's compensation act, page 62.

*Iowa*.—Changes in volume of employment in industries in the State, page 149.

*Maryland*.—Volume of employment and pay roll in certain industries, page 150.

*Massachusetts*.—Changes in volume of employment in 1,036 manufacturing establishments, page 151.

*New Jersey*.—Changes in volume of employment and amount of pay roll in 867 establishments, page 152.

*Pennsylvania*.—Conference on industrial nursing, page 59; and changes in volume of employment, in man-hours worked, and in pay-roll totals, page 154.

*West Virginia*.—Economic position of the Negro, page 27; coal-mine accidents, page 53; and report of operations under the State workmen's compensation act, page 63.

*Wisconsin*.—Report of operations under the State workmen's compensation act, page 64; and data on changes in volume of employment and pay roll in Wisconsin industries, page 155.

## PUBLICATIONS RELATING TO LABOR

### Official—United States

**COLORADO.**—Industrial Commission. *Ninth report, for the biennium December 1, 1924, to December 1, 1926*. Denver, 1926. 99 pp., folders.

Reviewed briefly on page 62 of this issue.

**MAINE.**—Department of Labor and Industry. *Eighth biennial report for fiscal years 1925-1926*. [Augusta, 1926?] 41 pp.

The seasonal character of the occupations of large numbers of Maine workers leads to serious unemployment in the State each spring and fall. The Maine Department of Labor in cooperation with the Federal Department of Labor is endeavoring to devise a scheme to meet this difficulty.

**MASSACHUSETTS.**—Department of Labor and Industries. *Annual report on the statistics of labor for the year ending November 30, 1926. Part III—Salaries of office employees in Massachusetts, May 1, 1926*. [Boston, 1927?] 59 pp., chart. Public document No. 15.

A review of the mimeographed report on this subject, issued in advance of the final report listed above, was published in the Review for January, 1927 (p. 141).

**WEST VIRGINIA.**—Bureau of Negro Welfare and Statistics. *Report, 1925-26: The Negro in West Virginia*. Charleston [1927?]. 147 pp.

Reviewed on page 27 of this issue.

— Compensation Commissioner. *Annual report, July 1, 1924, to June 30, 1925*. Charleston [1926?]. ii, 126 pp.

Reviewed on page 63 of this issue.

— Department of Mines. *Annual report, from July 1, 1924, to December 31, 1925*. Charleston [1926?]. 324 pp.

Data on coal-mine accidents in West Virginia, taken from this report are published on page 53 of this issue.

**WISCONSIN.**—Industrial Commission. *Biennial report, 1924-1926*. Madison, 1926. 58 pp., chart.

This report contains information on safety and sanitation, public and private employment offices, woman and child labor, workmen's compensation, apprenticeship, etc., as governed by the laws of Wisconsin, and on the work done by the commission in carrying out the laws.

— *Workmen's compensation, thirteenth report, July 1, 1924, to June 30, 1926*. [Madison, 1926?] 65 pp.

Reviewed on page 64 of this issue.

**UNITED STATES.**—Department of Agriculture. *Yearbook of agriculture, 1926*. Washington, 1927. xxi, 1298 pp., illustrations, charts.

Articles from this yearbook are reprinted on pages 35, and 103 of this issue.

— Department of Commerce. Bureau of Mines. *Bulletin No. 259: Placer-mining methods and costs in Alaska*, by Norman L. Wimmler. Washington, 1927. vii, 236 pp., map, diagrams, illustrations.

Wage data from this report are given on page 108 of this issue.

**UNITED STATES.**—Department of Labor. Children's Bureau. *Publication No. 176: Child welfare conditions and resources in seven Pennsylvania counties*. Washington, 1927. vii, 305 pp.

Gives the results of an investigation made at the request of the Pennsylvania Children's Commission. Seven counties, considered representative of social and economic conditions in different parts of the State, were selected, and a careful study was made of the laws, conditions, and practices relating to child welfare. The special purposes of the study were (1) to find out in each of the communities studied the extent and nature of the problems relating to children in need of special care; (2) to review the methods employed by these communities to deal with these problems; (3) to find out the extent to which activities in the interest of individual children embodied such principles and standards of social work as to give assurance that the expenditure of time and money was productive of permanent and beneficial results.

— — — Women's Bureau. *Bulletin No. 56: Women in Tennessee industries—a study of hours, wages, and working conditions*. Washington, 1927. vii, 120 pp., chart.

Reviewed on page 40 of this issue.

— — — *Bulletin No. 58: Women in Delaware industries—a study of hours, wages, and working conditions*. Washington, 1927. vii, 156 pp.

Reviewed on page 38 of this issue.

### Official—Foreign Countries

**AUSTRALIA (SOUTH AUSTRALIA).**—Statistical Office. *Statistical register of the State of South Australia for the year 1925-26. Part V: Production. Section 1—Report on agricultural, livestock, and manufactory statistics*. Adelaide, 1927. 30 pp.

Contains data on number of workers employed in agriculture and in various industries, total amounts paid in wages, etc.

— (WESTERN AUSTRALIA).—Registry Department. *Pocket year book of Western Australia, 1927*. Perth, 1927. 108 pp.

Contains statistics of employment, rates of wages of adult workers in principal occupations, average retail prices of commodities in Perth, 1925 and 1926, index numbers of purchasing power of money, friendly societies, building and cooperative and provident societies, trade-union membership, etc.

**CHILE.**—Oficina Central de Estadística. *Anuario estadístico de la República de Chile, 1925. Vol. VIII—Minería y metalurgia*. Santiago, 1926. vii, 57 pp.

Data on wages in the coal and the copper mines of Chile are published on page 109 of this issue.

**GREAT BRITAIN.**—Board of Trade. *Statistical abstract for the United Kingdom for each of the fifteen years from 1911 to 1925. Seventieth number*. London, 1927. x, 367 pp. [Cmd. 2849.]

Data on pensions, poor relief, and unemployment insurance in England and Wales, taken from this report, are given on page 65 of this issue.

— Industrial Assurance Commissioner. *Report for the year ending December 31, 1926*. London, 1927. 177 pp.

Contains reports of decisions in disputed cases, and gives for the industrial insurance and collecting societies covered data as to business done, capital involved, number of policies lapsed, kinds of benefit paid, and the like.

— Industrial Fatigue Research Board. *Seventh annual report, to December 31, 1926*. London, 1927. 28 pp.

Discusses briefly the various investigations carried on by the board during 1926, among which were studies of hours of labor, accident causation, physiology of ventilation, vocational guidance, sickness in cotton-weaving sheds and in the

printing industry, weight carrying and lifting by women, load carrying by men, atmospheric conditions in mines, and telegraphists' cramp.

**GREAT BRITAIN.**—*Registry of Friendly Societies. Report for the year 1925. Part 3: Industrial and provident societies. Part 4: Trade-unions. London, 1927.* [Various paging.]

The societies covered in Part 3 include a great variety of activities, such as trading, credit, production and distribution, land and housing operations, and general cooperative development schemes. In 1924 there were in Great Britain 5,801 of these societies, with a membership of 5,685,000 and assets of £202,375,000. Full statistical details are given, with description of the work carried on by the different organizations.

Part 4 contains data for the year ending December 31, 1924, which show an upward trend for trade-unionism, but which, owing to the developments of 1925 and 1926, appear much out of date. In view of the arguments now being advanced in support of the Government's trade-union bill, the most interesting section of the report is the discussion of a complaint brought by a trade-union member that his union had committed a breach of the rules concerning political activity in that it had paid an affiliation fee to the Trades-Union Congress out of its general fund, to which all members must contribute, instead of from its political fund, from which a member might "contract out" if he did not wish to support the union's political policy. Such complaints have been very rare, and this was the only one received during the year. The findings of the registrar, before whom the matter was argued, are given in full, the conclusion reached being that no breach of the rules had occurred and that the member had no valid ground of complaint.

**INTERNATIONAL LABOR OFFICE.**—*Credit cooperation as adapted to the needs of the worker, by Roy F. Bergengren. Geneva, 1927. 32 pp. (Reprinted from International Labor Review, May, 1927, pp. 709-740.)*

Reviewed on page 68 of this issue.

— *International Labor Conference, tenth session, Geneva, May, 1927. Supplementary report on sickness insurance. (First item on the agenda.) Geneva, 1927. 45 pp.*

Contains the replies of Greece, Irish Free State, Lithuania, and Yugoslavia to the questionnaire on sickness insurance sent out by the International Labor Office, which had not been received when the previous report was published.

— *International labor directory, Part VI: Cooperative organizations. Geneva, 1927. viii, 110 pp.*

A directory of cooperative organizations, printed in English, French, and German, classified by countries and arranged so as to show the affiliations of societies. Each name entry also gives the date of foundation, chief officials, the names of any periodicals published, affiliation, and membership. Supplementary tables are included showing amount of business of trading societies, banks and credit societies, and insurance societies.

**UNION OF SOUTH AFRICA.**—*Office of Census and Statistics. Official yearbook of the Union and of Basutoland, Bechuanaland Protectorate, and Swaziland, covering the period 1910-1925. No. 8-1925. Pretoria, 1927. xxx, 1130 pp., maps, charts.*

Gives an account of the history and development of the Union, with a discussion of the situation in 1925, covering its principal social, economic, and industrial aspects. The sections of interest to labor include data on labor conditions, unemployment, trade-unions, operations of arbitration boards, apprenticeship, labor legislation, wages and hours of labor, miners' phthisis, wholesale and retail prices, housing and rents, cost of living, farm labor, agricultural cooperation, conditions of native labor, etc.

**Unofficial**

**ARENDT, JOSEPH S. J.** *La nature, l'organisation et le programme des syndicats ouvriers chrétiens.* Paris, Action Populaire, 1926. 323 pp.

The retardation in the development of Christian trade-unionism in some localities and the checks and setbacks of the movement in other localities should, the author holds, be largely attributed to the lack of properly prepared leaders among the Christian workers.

**ARNOT, R. PAGE.** *History of the Labor Research Department.* London, Labor Research Department, 1926. 62 pp.

**FABIAN SOCIETY.** *Tract No. 222: The trades disputes and trades-union bill: an analysis and commentary by William A. Robson.* London, 1927. 8 pp.

An analysis of the bill from the standpoint of an opponent. One or two of the points which the author attacks most strongly were amended while the bill was under discussion, but in the main his arguments have not been affected.

**INFORMATION BUREAU ON WOMEN'S WORK (TOLEDO, OHIO).** *The floating world.* Toledo, 305 Commerce Guardian Building, 1927. 49 pp.

A study of 126 nonfamily working women in Toledo, Ohio, with particular reference to their manner of living and the reasons for their frequent changes of residence, with some discussion of their working experience, including wages, etc.

**INTERNATIONAL FEDERATION OF TRADE UNIONS.** *Report on activities during the years 1924, 1925, and 1926, submitted to the fourth ordinary congress, Paris, August, 1927.* Amsterdam, 1927. 158 pp.

**JOURNAL OF ADULT EDUCATION.** *A half-yearly review issued by the British Institute of Adult Education.* Vol. I, No. 1, September, 1926. London.

Research is the chief objective of this journal, and the editors state it is the first of its size and scope to be devoted to considering adult education, in and for itself, and aside from the economic, political, or religious purposes such education ordinarily serves.

**LEAGUE OF NATIONS UNION.** *Towards industrial peace. Being the report of the proceedings of a conference organized by the League of Nations Union and held at the London School of Economics, February 1-4, 1927, on systems of fixing minimum wages and methods of conciliation and arbitration.* London, P. S. King & Son (Ltd.), 1927. 283 pp.

**NATIONAL CHILD LABOR COMMITTEE.** *Fourteen is too early,* by Raymond G. Fuller. New York City, 1927. 40 pp.

The author calls attention to the fact that until recently the early withdrawal of children from school was alleged to be a matter of economic necessity, but that of late a new justification has been sought in the mental inferiority of those who leave school, as shown by the results of intelligence tests. Disputing the validity of this justification, the author discusses the bearing of intelligence tests upon the real capacity of a child, the relative value of school and work conditions upon normal development, and the force of the arguments brought forward to limit the period of compulsory school attendance sharply to 14 years of age. He emphasizes the fact that withdrawal from school is due to many causes quite apart from the mental capacity shown by the tests, and declares that "the notion that a child's future success depends upon his I. Q. [intelligence quotient] is arrant nonsense." From many quarters comes a claim that any raising of the period of full-time school attendance is harmful, because of the individual differences in children's abilities and needs. "To compel all children, regardless of these differences, to remain in school until 16 is, we are assured, inadvisable from the standpoint of the welfare and education of the child. We reply that to release them en masse at 14, regardless of these same differences, is still worse. And we assert that unless individual differences in children are better provided for even in our present schools than they are ever likely to be in industry, the schools are

failing to serve the educational function which justifies their existence." The nonadaptation of industry to the individual child is discussed at some length, and the conclusion is reached that while many of the schools need a different attitude and different methods, they are, even under present conditions, better fitted to give the child a chance for proper development than is the kind of industrial experience open to a boy or girl of 14.

NATIONAL WOMEN'S TRADE UNION LEAGUE OF AMERICA. *Proceedings, tenth biennial convention, Kansas City, Mo., June 28 to July 3, 1926. Chicago [1926?]. 103 pp.*

A brief account of this meeting was published in the October, 1926, issue of the Review (p. 118).

SQUIRE, ROSE E. *Thirty years in the public service. London, Nisbet & Co. (Ltd.), 1927. 238 pp.*

Factory inspection in England dates back to 1833, but it was not until 1893 that the first woman factory inspectors were appointed. The author, one of the first woman factory inspectors, began her work in that year under a local authority and in December, 1895, was appointed as an inspector in the Home Office, being the fourth woman so appointed. From that time until her retirement in 1926 she was officially connected in one capacity or another with the question of improving conditions for the workers. Her book constitutes a brief but informing survey of a critical period, which is of interest to all concerned with the history of labor in Great Britain, and indicates the need for further improvement, especially in regard to the factory and truck acts. It is also an interesting picture of labor conditions, past and present. Her intense interest and delight in her work are so evident that the writer of the foreword suggests the book might well have been called "The joyous adventures of Rose Squire," a suggestion in which the reader is apt to concur.



SEPTEMBER, 1927

GOVERNMENT DOCUMENTS RECEIVED